

**The Vieille Montagne Lead and Zinc  
Company**

**Copy book of Monthly  
and Annual Reports on the  
Nenthead Lead Mines**

**Regarding stocks, Ore reserves, Wages, Mills,  
Production  
and Development.**

**1937-1949**

**Manager Amos Treloar**

**Source  
Carlisle Archive Centre  
[carlisle.archives@cumberland.gov.uk](mailto:carlisle.archives@cumberland.gov.uk)**

**Transcribed  
by  
David McAnelly  
March 2017**

# Report on the Nenthead Mines September 1937

## Report on the Nenthead Mines

September 1937

	<u>Nentbury</u>	<u>Rampgill</u>	<u>Ikraith Hole</u>	<u>Roddarup</u>	<u>Totals</u>
Ore mined	1147 Tons.	One Steam Engine		1886 Tons	3063 Tons
Ore milled	1149 "	ran 3 hours daily.	Closed	1620 "	2799 "
Galena produced	645 "	One Truck Oil		100-65 "	170-15 "
% of Galena.	5.89%	Engine ran 12		6.2%	5.97% 6.2%
Blende prod.	26.55 Tons	hours daily.		—	26.55 Tons
% of Blende	2.36%			—	2.36%
Hours worked	303 hours.			226 hrs	303 226
Tons per hour.	3.9 Tons			7.17 Tons	3.9 7.17

## Stocks

	<u>Nentbury</u>	<u>Rampgill</u>	<u>Roddarup</u>	<u>Wellhope</u>	<u>Totals</u>
Crude Ore	NIL	NIL	442	2500	2942 Tons
Withheld	1097.1	250	150	NIL	1497.1 "

Rough Blende 41.350 Tons.

Fine Blende 25.150 "

Galena at Nentbury 28.65 Tons. Polaris Ore at Nentbury 781 Tons

" " Roddarup 36.45 " " " Roddarup 1031 "

Coal consumed at Rampgill: 15 Tons.

Truck Oil " " 8 "

" " " " " " 15 "

" " " " " " 3 "

Units of Electricity used in Roddarup Mine 38216

August 31225.

Compressed air produced at Nenthead and Wellhope 1100 cu. ft. at a pressure of 80 lbs at the face.

Compressed air produced at Roddarup 1350 cu. ft. at a pressure of 80 to 85 lbs per square inch at the face.



## **General Remarks re Mine & Mill**

Nentsbury Mine. To keep the mill supplied two shifts it was necessary to break more ore in Nentsbury. The output for the month was increased to 1179 tons of ore and the value 5.89%. About 200 of the 1179 tons was broken in the Admiralty Concession and practically all the Blende production came from that area.

Development. The S1 E. forebreast was advanced 60 ft. The vein raised from a fair quantity of Blende mixed with Witherite and a little galena to Blende mixed with Witherite and only small traces of galena. The rock has been both hard and soft. In this particular area, a diamond drill might do good work by boring N & S to cut the parallel vein.

In the forebreast from the rise near the boundary the advance was 65 ft. This forebreast is now 260 ft. E of the boundary & only 40 ft. from the line of the Extension granted by the V.M. Company to Mr Pugh in I think 1900. When we work the Extension if nothing is found, we shall drive W from the Rise.

Personally, I think it more probable that whatever caused the improvement in High Raise came in W of the boundary and not E. It is logical to think the Mr Pugh would ask for an extension of 300 ft. after he saw an improvement rather than before.

Headings. No appreciable change. October values should be about 6%.

Mill. Maintained in good condition, and working smoothly.

Gravel Sales. It is very difficult to sell even the washed Limestone gravel in large quantities owing to limestone gravel being objectionable the Ministry of Roads. We are however obtaining some good orders from small Councils and private contractors.

Potters Ore. The sale of Potters Ore is not brisk in England. Most sold goes to the continent from orders sent from H.O.

Witherite. None produced at present

Miners Wages. No change has been made. Should we find richer ore and produced more Lead and make a profit the miners wages will be increased.

## **Rodderup Fell Mine and Mill**

Mine. The output from Rodderup was 1856 tons. A record for the mine. The value was lower by 0.6%. The reason was a general falling off in the Flats and increasing the output from the East section without having facilities for picking. I do not consider there is any reason for considering that the value of the Flats generally will on average be much below the value estimated, since all areas are opened up and in good working order. If all goes well the output from Rodderup should amount to 2000 tons per month by the end of the year, and if 6% is recovered the monthly output should soon amount to 150 tons of concentrates monthly.

Development is going ahead as fast as possible. It must be taken into consideration that several of the youngest of the skilled miners left the district during the period 1930 – 37, and some who were energetic in 1930 are no longer very fit. Consequently, we have to train a new brigade of young men and youths. This will take time. On the whole, we are making fair progress. Arrangements are in hand for starting the second shift in the Mill. This of course will take from two to three months to accomplish. Men must be trained in our new methods of milling. In all possibility, November month will see the mill running two shifts and I hope the output will approach 2500 tons of mine ore crushed.

The new machinery is running smoothly. So far, we are maintaining our output with 4 cylinders of the Compressor and the Hydro. We have now reserve power which is very important & consoling.

Mill. The Mill is doing good work and the tons per hour very high. It is a question if the high tons per hour is quite justified. It seems that of late the value % of lead in the concentrates has dropped, and the % of lead in some of the tailings risen. I have called the attention of the mill foreman to this matter. The mill is in good condition.

# Report on the Nenthead Mines October 1937

## Report on the Nenthead Mines October 1937

	<u>Nentbury</u>	<u>Rampgill</u>	<u>Sraith Hole</u>	<u>Rodderup</u>	<u>Totals</u>
One mined	1280 Tons	one steam	idle.	2071 Tons	3351 Tons
One milled	1280 "	engine ran		1931 "	3211 "
Current's galena	75.65 "	most of the month		99 Tons	174.65 "
% of galena	5.90 %	to hours per day.		5.12 %	5.9 %
Blend. Concentr.	20.80 Tons	one fuel oil		nil	20.80 Tons
% of Blende	1.62 %	engine 10 hours		nil	1.62 %
Hours worked	387 hours	per day. Blende		29 1/2 hours	337 1/2
Tons per hour	3.8 Tons	of water.		6.52 Tons	3.8 6.5

## Stocks

	<u>Nentbury</u>	<u>Rampgill</u>	<u>Rodderup</u>	<u>Wellhope</u>	<u>Totals</u>
Gravel ore	nil	nil	558	2300	2858 Tons
Blende - Wellhope	1097.1	250	150	nil	1497.1 "

rough blende 19.899  
fine blende 20.350  
Galena at Nentbury 23.35    Potters ore at Nentbury 76.927 Tons  
Do " Rodderup 24.25    Do " Rodderup 90.250 "

Coal consumed at Rampgill 26 Tons  
Fuel oil " " 8 Tons  
Do " " Nentbury 3.5 "  
Do " " Rodderup nil 3.00 "  
Volts of electricity consumed at Rodderup mine 40329 volts

Compressed air produced at Nenthead & Wellhope  
1140 cu. ft. per min. at a pressure of 80 lbs at the face.

Compressed air produced at Rodderup 1250 cu. ft.  
per min. at a pressure of 80 to 85 lbs at the face.

Notes There was more coal consumed at Rampgill during  
the month owing to scarcity of water.  
a.s.

October 1937

Per Previous

Sheet No. 119

October 1937

Production from Previous Months O.R.			Galena Values			Blende Values			Milled Values		
Name of Mine	Ac. ft.	Cons.	Previous Months O.R.	Ac. ft.	Cons.	Previous Months O.R.	Ac. ft.	Cons.	Previous Months O.R.	Ac. ft.	Cons.
Export Mine	2,994	164	44,280	24,35	2268						
Box U.S. of M.	-	-	72,104	4616	4616						
Lincoln Mine	3,200	178	-	-	-						
1st Mine	5,964	331	24,729	1,369	1,058						
2nd Mine	-	-	904,548	50,334	50,334	904,548	50,334	50,334	904,548	50,334	50,334
3rd Mine	4,108	231	89,904	5,001	4,770	89,904	5,001	4,770	89,904	5,001	4,770
4th Mine	-	-	38,383	2,427	8,434	38,383	2,427	8,434	38,383	2,427	8,434
5th Mine	1566	87	440,065	31,529	31,443	440,065	31,529	31,443	440,065	31,529	31,443
Summary	17,885	994	1,614,016	87,611	86,795	1,614,016	87,611	86,795	1,614,016	87,611	86,795
	3,804	311									
	3,689	1,205									

Galena Values			Blende Values			Milled Values		
Name of Mine	Ac. ft.	Cons.	Previous Months O.R.	Ac. ft.	Cons.	Previous Months O.R.	Ac. ft.	Cons.
Export Mine	41,883	2,268						
Box U.S. of M.	72,104	4,616						
Lincoln Mine	-	-						
Liverick Mine	18,765	1,038						
1st Mine	904,548	50,334						
2nd Mine	89,904	4,770						
3rd Mine	38,383	2,427						
4th Mine	438,499	21,443						
Summary	1,614,016	86,795						

Development & Storage: 145 ft. x 44 ft. x 18 in.

Development: 122

# Montgomery Mine

October 1937

Development footage - 1145' at - 1144.195 m.

Calculated inches of galena = 1.59

Development (Credit) S. Vein East in middle section Little blower and contents.  
H. Brown and partner 51 days worked.

L	H	SF	SH	W	CF	CH	
75	27	1190	115.52	25	2450	67.38	} @ days wagon
<p>Charge to mill - mill.</p>							

Wagon paid £25-10-0

Cost per cu. m. 7/11

Development (Credit) Boundary vein East in the top flat dead.  
H. Brown and partner 51 days worked.

L	H	SF	SH	W	CF	CH	
75	27	625	118.77	5	2625	44.33	} @ days wagon.
<p>Charge to mill - mill.</p>							

Wagon paid £26-15-6

Cost per cu. m. 7/12

L. Vein south of S. V. (East portion) in top flat 1.5' galena disseminated  
H. Brown and partner days worked

L	H	SF	SH	W	CF	CH		
Heading	22	7	15.4	14.50	6	924	26.16	} @ days wagon
	19	8	15.2	14.12	6	912	25.82	
						1836	51.98	

Wagon paid £20-8-0

Charge to mill - 109 tons.

Cost per cu. m. 7/10

L. Vein south of S. V. (west portion) in the top flat 1.5' galena disseminated.  
H. Brown and partner 50 1/2 days worked

L	H	SF	SH	W	CF	CH	
25	19	475	114.13	6	2850	80.7	} @ days wagon.
<p>Charge to mill - 142 tons</p>							

Wagon paid £20-6-0

Cost per cu. m. 5/1

S. V. west of L. Vein in the top flat 2' galena disseminated.  
Thos. Richardson and partner 25 days worked

L	H	SF	SH	W	CF	CH	
9	14	126	11.7	13	1638	46.37	} @ days wagon
<p>Charge to mill - 105 tons.</p>							

Wagon paid £10-0-0

Cost per cu. m. 11/14

S<sub>2</sub> Vein east of L. Vein in the top flat 1.5" galena disseminated.  
C. Armstrong and partner 45 3/4 days worked  

L	H	SF	SH	W	CF	CH
24 x 15 = 360		33.44 x 7 = 2520				1435

 } @ days wages.  
 Charge to mill = 149 tons.  
 Wagon paid £ 18-6-0      Cost per cu. m. 5/2

D' Vein east of S<sub>2</sub> Vein in the top flat 1" galena as 2 sets.  
H. Loomis and partner 44 days worked  

L	H	SF	SH	W	CF	CH
12 x 7 = 84		7.8 x 6 = 504				11.27
26 x 7 = 182		16.91 x 5 = 910				25.77
					1414	40.04

 } @ days wages.  
 Charge to mill  
 Wagon paid £ 19-12-0      Cost per cu. m. 9/4

D' Vein between High Run and S<sub>2</sub> Vein in middle flat 2" galena as 2 sets.  
T. Hunsbeck and partner 53 1/2 days including 5 days labouring.  

L	H	SF	SH	W	CF	CH
Drive 4 x 4 = 49		14.55 x 5 = 245				6.94
Heaving 20 x 8 = 160		14.56 x 6 = 960				27.18
Drive 6 x 7 = 42		3.9 x 9 = 378				10.70
					1583	44.82

 } @ days wages  
 Charge to mill = 103 tons.  
 Wagon paid £ 21-7-0      Cost per cu. m. 9/6

Sincay Vein North String in the middle flat 1" galena disseminated.  
A. Keilly and partner 46 days worked  

L	H	SF	SH	W	CF	CH
Drive 26 x 8 = 208		17.32 x 5 = 1040				29.44

 } @ days wages  
 Charge to mill = 149 tons.  
 Wagon paid £ 18-7-0      Cost per cu. m. 12/6

Sincay Vein String South of T' Vein in the low flat 3" galena as 1 set.  
C. Stout and partner 52 1/2 days worked.  

L	H	SF	SH	W	CF	CH
Drive 48 x 9 = 432		40.13 x 5 = 2160				61.16

 } @ days wages.  
 Charge to mill = 153  
 Wagon paid £ 21-0-0      Cost per cu. m. 6/10

13

T. Vein slope in the low flat 2' galena as 1 mt.  
Lamm's Loversick and partner 28 days worked.

	L	H	SF	SM	W	CF	CH
Slope	20	8	- 160	- 14.86	x 6	- 960	- 27.18
						330	9.34
						<u>630</u>	<u>17.84</u>

@ days wages

Tonnage to mill - 46 tons  
 Wagon paid £ 11-2-0      Cost per cu. m. 12/6

String from side of T. Vein in the middle flat 1' galena as 3 mts.  
M. Short and partner 23 days worked

	L	H	SF	SM	W	CF	CH
Heaving	26	6	- 156	- 14.49	x 6	- 936	- 26.50

@ days wages

Tonnage to mill - 44 tons  
 Wagon paid £ 9-6-0      Cost per cu. m. 7/6

String at the side of L. Vein from S. Rame in middle flat 1' galena as 3 mts.  
L. J. Pickering and partner 50 days worked

	L	H	SF	SM	W	CF	CH
Drive	18	7	- 126	- 14.7	x 5	- 630	- 17.84
Heaving	6	18	- 108	- 10.03	x 6	- 648	- 18.35
						<u>1278</u>	<u>36.19</u>

@ days wages

Tonnage to mill - 67 tons  
 Wagon paid £ 19-18-6      Cost per cu. m. 7/6

Admiralty Concession in the top flat Blende and little lead.  
E. Graham and partner 91 3/4 days worked

	L	H	SF	SM	W	CF	CH
16 x 8	- 128	- 11.89	x 12	- 1536	- 43.49		
24 x 4	- 189	- 17.56	x 12	- 2268	- 64.22		
				<u>3804</u>	<u>107.71</u>		

@ days wages

Tonnage to mill - 216 tons  
 Wagon paid £ 26-8-7      Cost per cu. m. 14/11



## **General remarks re Mines & Mill**

Nentsbury Mines. The mine output was 1280 tons of ore. Approximately 200 tons was broken in the Admiralty Concession.

The grade 5.90% compared with 5.89 for Sept was about the same. The recovery of 20.80 tons of Blende was produced mainly from ore broken in the admiralty concession.

Development. The total footage driven was 145' = 44.195 metres.

S1 E was advanced 70'. The vein contains Blende & Witherite & traces of Galena. The product is unpayable.

The footage driven in the level near the boundary rise was 75'. No mineral has been discovered in driving E. Work has been stopped E & the miners removed to drive W from the rise. We are anxious to find a N & S vein even if small in this area & if found we propose driving S to find S 1 vein if it continues.

Headings. The details of the working places & the months results indicate very little change.

Mill. The Mill is in good condition. Unfortunately, we have not had full supply of ore for the second shift consequently the cost per ton is slightly higher than it should be.

Gravel Sales. We are doing our utmost to sell as much gravel as possible. At present, we are producing a large quantity at Rodderup. If it means reducing the price per ton we shall do so.

Potters Ore. The sales to Belgium have of late increased considerably & we have sold small quantities in England.

Witherite. None produced.

General. The disastrous fire which occurred Oct 17<sup>th</sup> & destroyed the Drawing Office, Plans & drawing instruments, also destroyed all my letter to & from H.O. for 14 years & all copies of my reports Estimates, Budgets &c. I am therefore in the unfortunate position of not knowing what I wrote even this year.

A.T.



# Roddenup Tell Mine

Month of October 1937

Development footage - 44.5 feet - 13.568.

Development rise to South flat Credit 2700 dead.

Jos. Robinson and partner 51 days worked.

L W SF SH H CF CH } @ days wages  
20.5 x 8 = 164 - 15.24 x 6 = 984 - 27.86

Yannage to mill - nil

Wages paid £ 22-19-0

Cost per cu. m. 11/6

Development drive north of No 2 flat Credit 2700 dead.

J. Dalchin and partner 46 days worked

L W SF SH H CF CH } @ days wages  
24 x 5 = 120 - 11.15 x 7 = 840 - 23.48

Yannage to mill - nil

Wages paid £ 17-5-0

Cost per cu. m. 11/6

West flat. Top flat No 1 north

A. R. Fairley and partner 48 days worked

L W SF SH H CF CH } 36/5 @ 34/2  
19 x 33 = 627 - 58.25 x 8 = 5016 - 142.03  
Side 6 x 6 = 36 - 3.34 x 8 = 288 - 8.15  
5304 150.18

Yannage to mill - 302 tons.

Total money £ 62-12-11

Less costs £ 10-14-0

£ 51-18-11

Cost per cu. m. 6/11

Top flat No 2 north.

John Atkinson and partner 44 days worked

L W SF SH H CF CH } 28/3 @ 30/2  
18 x 26.5 = 474 - 44.31 x 8 = 3816 - 108.05

Yannage to mill - 218 tons.

Total money £ 37-15-0

Less costs £ 7-2-9

£ 30-12-3

Cost per cu. m. 5/5

Flat No 4 west  
H. Lowe and partners

77 days worked

L	N	SF	SH	H	CF	CH
12.5	x 23.5	= 293.75	- 27.28	x 12	= 327.36	- 97.81

24 2/3 @ 30¢

Charge to mill - 202 tons

Total money £ 36-15-0  
Less cont. £ 7-10-9  
£ 29-4-3

Cont per cu. m. 5/6

Flat No 9 west  
J. Milburn and partners

74 days worked

L	N	SF	SH	H	CF	CH
13	x 23.5	= 305.5	- 28.37	x 17	= 519.4	- 147.04

26 2/3 @ 34¢

Charge to mill - 296 tons

Total money £ 61-4-0  
Less cont. £ 7-14-9  
£ 53-16-3

Cont per cu. m. 1/3

West flats No 9 west  
A. Beadle and partners

101 days worked

L	N	SF	SH	H	CF	CH
12	x 34	= 408	- 37.9	x 14	= 541.2	- 161.73

37 1/2 @ 31¢

Charge to mill - 324 tons

Total money £ 61-9-8  
Less cont. £ 12-3-3  
£ 49-6-5

Cont per cu. m. 4/5

East flats going north  
Geo. Barwick and partners

78 days worked

L	N	SF	SH	H	CF	CH
14	x 27	= 378	- 35.12	x 11.5	= 434.7	- 123.08
3.5	x 19	= 66.5	- 6.10	x 1	= 67	- 1.88
					441.4	124.96

37 1/2 @ 31¢

Charge to mill - 251 tons

Total money £ 47-10-8  
£ 13-15-0  
£ 33-15-8

Cont per cu. m. 5/6

East flat.

J. Johnson and partners

63 days worked

	L	W	SF	SH	H	CF	CH	
	19	x	23	=	437	=	40.6	x
								9.5
								= 415.2
								= 114.55
Less.	19	x	8	=	152	=	14.09	x
								7
								= 106.4
								= 30.13
								<u>3088</u>
								<u>87.42</u>

21 7/8 fathoms  
@ 3/4

Tonnage to mill - 176 tons

Total money £ 32-5-0

Less cost £ 8-2-6

£ 24-2-6

Cost per cu. m. 5/6

---

West flat.

Thor Bursky and partners

78 days worked

19	x	25.5	=	484.5	=	445.00	x	11
								= 5330
								= 150.9

3 7/8 & 3 1/2

Tonnage to mill - 302 tons

Total money £ 63-16-6

Less cost £ 12-0-0

£ 51-6-6

Cost per cu. m. 6/10

## Rodderup Fell Mine & Mill

Mine. The output from Rodderup was 2071 tons.

The value was lower by 1.08%. It is difficult to explain why there should be a falling off on value but not less than 5 of the 8 flats in different parts of the mine have for no reason which can be explained fallen off in value simultaneously. Also in two flats in the East End section a quantity of iron pyrites was mixed with the galena. It is disappointing that just when we got the mine opened up & commenced two shifts milling that the grade should drop & I can see no reason why it has. Taking a reasonable view of the situation I consider we may expect the average value to return to at least 6% in the near future. Arrangements are in hand to open up the mine to produce more ore & rises will be put up from the 20 fathom level to the 4 fathoms Limestone to see if the "Flats" continue E. We expect early in Nov. to rise up to the Limestone in the Rise now going up in the "Whin". We shall not be far from the vein & if not worked shall test the Vein in this area. A new cage has been fixed on the East End shaft thus enabling us to hoist twice as fast, previously & ever since the shaft was equipped, there was one cage & a balance weight.

Mill. The Mill continues to do good work & the "Tons per hour" now over 6 tons is maintained. The Mill is running two shifts & from the report will be seen that we can crush over 500 tons per week. I see no reason when Rodderup is fully opened up & the Mill is worked 3 shifts why 3000 tons per month of 26 working days should not be crushed.

A.T.

# Report on the Nenthead Mines November 1937

## Report on the Nenthead Mines November 1937

	<u>Newshury</u>	<u>Ranpkill</u>	<u>Scraith Hole</u>	<u>Rodderup</u>	<u>Totals</u>
Coal mined	1304 Tons	One steam	idle	2283	3581 Tons
Coal milled	1304 "	Electric ran		2436	3737 "
Galena concen.	75.75%	when required.		122.1	197.85
% of Galena	5.82%	One fuel oil		5.01	5.82
Blende concen.	22.40 Tons	Electric ran		nil	22.40 Tons
% of Blende	1.70%	10 hours per		nil	1.70%
Hours worked	339 hours	day.		399	339
Tons per hour	3.83 Tons			6.1	3.83

## Stocks

	<u>Newshury</u>	<u>Ranpkill</u>	<u>Rodderup</u>	<u>Wellhope</u>	<u>Totals</u>
Crude oil	nil	nil	Tons 398	Tons 2300	Tons 2698
Blende witherite	1097.1	250	150	nil	1497.1

Rough blende 30.291 Tons  
fine do 32.350 "  
Galena at Newshury 9.78 tons. Potters ore at Newshury 64.6% Tons  
do at Rodderup 12.65 " do " Rodderup 78.950 "

Coal consumed at Ranpkill 18 tons  
Fuel oil " " " 8 "  
do " " Newshury 3.5 "  
do " " Rodderup 3.0 "  
Units of electricity consumed at Rodderup mine 35150 units.

Compressed air produced at Newshury & Wellhope  
1100 cu. ft per. min. at a pressure of 80 lbs per Sq. inch.

Compressed air produced at Rodderup 1250 cu. ft.  
per. min. at a pressure of 80 to 85 lbs per Sq. inch.

Note There was more water available for power during Nov. 1937  
hence less coal consumed at Ranpkill & less units  
of electricity at Rodderup.

A.T.

Leads Out per Ton - 18.

On Hand

November 1907

Name of Vein	Gallons Values		Blonde Values		Previous Month's		Previous Month's		Previous Month's	
	Cu. ft.	Tons	Cu. ft.	Tons	Cu. ft.	Tons	Cu. ft.	Tons	Cu. ft.	Tons
Deport Vein	4727	263	41,883	3,268	36,556	7008				
Box V.S. of H.R.	-	-	72,107	4,816	72,107	4,816				
Lincoln Vein	4130	229								
Lincoln Vein	5534	310	18,465	1,038	13,151	728				
1st Sun Vein	-	-	90,348	5,934	90,458	5,023	40,458	5,023	40,458	5,023
2nd Sun Vein	4131	229	82,446	4,770	81,615	4,541	81,615	4,541	81,615	4,541
High Road	-	-	38,883	2,427	38,883	2,427	38,883	2,427	38,883	2,427
Valley Vein	564	48	43,409	2,144	43,409	2,144	43,409	2,144	43,409	2,144
Minerality	19436	1079	43,409	2,144	43,409	2,144	43,409	2,144	43,409	2,144
	3479	193								

Development Footage - Mc.

On Hand by Development - Mc.

Name of Vein	Gallons Values		Blonde Values		Previous Month's		Previous Month's		Previous Month's	
	Cu. ft.	Tons	Cu. ft.	Tons	Cu. ft.	Tons	Cu. ft.	Tons	Cu. ft.	Tons
Deport Vein	36,556	7008	36,556	7008	36,556	7008	36,556	7008	36,556	7008
Box V.S. of H.R.	72,107	4,816	72,107	4,816	72,107	4,816	72,107	4,816	72,107	4,816
Lincoln Vein										
Lincoln Vein	13,151	728	13,151	728	13,151	728	13,151	728	13,151	728
1st Sun Vein	90,458	5,023	90,458	5,023	90,458	5,023	90,458	5,023	90,458	5,023
2nd Sun Vein	81,615	4,541	81,615	4,541	81,615	4,541	81,615	4,541	81,615	4,541
High Road	38,883	2,427	38,883	2,427	38,883	2,427	38,883	2,427	38,883	2,427
Valley Vein	43,409	2,144	43,409	2,144	43,409	2,144	43,409	2,144	43,409	2,144
	15,409	728	15,409	728	15,409	728	15,409	728	15,409	728

# Kentbury Mine

## November 1934

Development footage = 140 fms = 42.36 mtr.

Calculated inches of galena = 1.7"

S<sub>2</sub> Vein East in the top random some blade galena + anthracite  
Chas Cowen and partner 54 days worked

	L	H	SF	SH	W	CF	CH	
Drive	75	7	525	48.77	5	2625	44.32	} @ deep wages
								Tonnage to mill - nil
Wages paid £ 28-7-0								Cost per cu. m. 7/8

Boundary line drive in middle random 10 values.  
Chas Huddell and partner 54 days worked

Rise	22 x 6 = 132	12.26 x 6 = 792	22.42	} @ deep wages
Drivels	43 x 7 = 301	27.97 x 5 = 1505	42.61	
		2247	65.03	

Tonnage to mill - nil  
 Wages paid £ 25-13-0 Cost per cu. m. 7/11

L' Vein South of S<sub>2</sub> in the East Portion in top flat 1.5" galena in 2 str.  
Leo Short and partner 52 days worked including 15 days latting.

	L	H	SF	SH	W	CF	CH	
Drive	11 x 8 = 88	8.17 x 10 = 880	24.91	} @ deep wages				
"	11 x 8 = 88	8.17 x 6 = 528	14.95					
Slope	12 x 2 = 24	2.23 x 10 = 240	6.79					
			1648	46.65				

Tonnage to mill - 85 tons  
 Wages paid £ 20-16-0 Cost per cu. m. 8/11

L' Vein string South of S<sub>2</sub> West Portion in top flat 1.5" galena  
J. Moffatt and partner 54 days worked

	L	H	SF	SH	W	CF	CH	
22 x 21 = 462								} @ deep wages
42.92 x 6 = 2772								
								Tonnage to mill - 141 tons.
Wages paid £ 21-12-0								Cost per cu. m. 5/6



S<sup>2</sup> vein west of L. in the top flat 2.5' galena disseminated.  
Thos Richardson 24 days worked

	L	H	SF	SH	W	CF	CH	
	16	15	= 240	22.24	x 8	= 1920	= 54.36	} @ days wages
	Tonnage to mill 135 tons							

Wages paid £ 10-16-0

Cost for ca. m: 4/8

S<sup>2</sup> vein east of L. vein in the top flat 1.5' galena disseminated.  
A. Armstrong and partner 52 days worked

	L	H	SF	SH	W	CF	CH		
Heading	11	15	= 165	15.33	x 7	= 1155	= 32.69	} @ days wages	
Rise	20	6	= 120	11.15	x 6	= 720	= 20.38		
Drive	7	8	= 56	5.20	x 6	= 336	= 9.51		
							<u>2211</u>	<u>62.58</u>	

Tonnage to mill - 111 tons

Wages paid £ 20-16-0

Cost for ca. m: 6/8

D. vein string south of S<sup>2</sup> in the top flat 2' galena as two rib.  
W. L. Lewis and partner 54 days worked

	L	H	SF	SH	W	CF	CH	
Drive	40	7	= 280	25.99	x 7	= 1960	= 55.50	} @ days wages
	Tonnage to mill - 123 tons							

Wages paid £ 21-12-0

Cost for ca. m: 7/4

D. vein between H.R. and S<sup>2</sup> vein in the low flat 2' galena as 1 rib.  
J. Hadzefelt and partner 54 days worked

	L	H	SF	SH	W	CF	CH	
Side	16	6	= 96	8.92	x 11	= 1056	= 29.89	} @ days wages
Slope	19	7	= 136	12.63	x 6	= 916	= 23.10	
							<u>1872</u>	

Tonnage to mill - 116 tons

Wages paid £ 21-12-0

Cost for ca. m: 8/2

S<sup>2</sup> vein string between H.R. and D. vein in the middle flat 1.5' galena disseminated.  
Mat. Short and partner 31 days worked

	L	H	SF	SH	W	CF	CH	
Heading	20	6	= 120	11.15	x 6	= 720	= 20.38	} @ days wages
Slope Drive	5	7	= 35	3.25	x 5	= 175	= 4.45	
							<u>845</u>	

Tonnage to mill - 45 tons

Wages paid £ 12-8-0

Cost for ca. m: 4/10

String vein North String in the middle flint 1.5" galena as 2 ut.  
A. Kelly and partner 45 days worked  

L	H	SP	SH	W	CF	CH
20	x 14	= 280	= 25.49 x 6	= 1680	= 117.56	

 } @ days wages.  
 Tonnage to mill = 86 tons  
 Wages paid £18-0-0 Cost for ca. m. 7/7

String vein String South of T vein in the low flint 1.5" galena as 2 ut.  
G. Stout and partner 54 days worked  

L	H	SP	SH	W	CF	CH
70	x 7	= 490	= 45.52 x 5	= 2400	= 69.36	

 } @ days wages.  
 Tonnage to mill = 124 tons  
 Wages paid £27-0-0 Cost for ca. m. 7/9

"T" vein slope between R & D vein in low flint 3" galena as 1 ut.  
L. Kierick and partner 29 days worked  

L	H	SP	SH	W	CF	CH
18	x 8	= 144	= 13.37 x 6	= 864	= 24.46	

 } @ days wages.  
 Tonnage to mill = 100 tons  
 Wages paid £11-12-0 Cost for ca. m. 9/6

String beside St. Rine from Kierick in middle flint 1.5" galena as 1 ut.  
J. H. Fickering and partner 52 days worked including 8 days labouring  

L	H	SP	SH	W	CF	CH
8	x 12	= 96	= 8.92 x 6	= 546	= 16.31	
14	x 7	= 98	= 9.11 x 6	= 588	= 16.65	
					<u>1164</u>	<u>32.96</u>

 } @ days wages.  
 Tonnage to mill = 54 tons  
 Wages paid £17-12-0 Cost for ca. m. 10/8

Admiralty concession in top flint for galena & some blende  
E. Graham and partner 106 days worked  

L	H	SP	SH	W	CF	CH
24	x 7	= 168	= 15.61 x 10	= 1680	= 47.56	
13	x 7	= 91	= 8.45 x 9	= 819	= 23.19	
20	x 7	= 140	= 13.01 x 7	= 980	= 27.74	
					<u>3179</u>	<u>98.49</u>

 } @ days wages.  
 Tonnage to mill = 176 tons  
 Wages paid £30-8-6 Cost for ca. m. 6/5.



## **General Remarks re Mine & Mill**

Nentsbury Mine. The output from the mine was 1301 tons of which about 170 tons was broken in the Admiralty Concession. The percentage recovered was 5.82% which was 0.07% lower than the grade in Oct. The Blende recovered 22.40 Tons was mainly obtained from the Admiralty.

Development. The total footage driven was 140' = 42.66 metres. S 1 E was extended 75' = 22.86 metres. I am sorry to report that the Shale which has dipped E is now so far down that the black bed is in the roof of the level on the North Side. It will be possible to continue driving E for some distance possibly 200' on the South side of the Vein before the black bed is down in the roof on the S side. The outlook in this foulness & the Vein is not encouraging. In the rise near the boundary we rose 22' and drove west 43' a total of 65' = 19.8 metres. Nothing of value has so far been discovered.

Headings. No change of importance

Mill. The Mill continues to do good work.

Gravel Sales. Owing to the Wintery weather the sales of Gravel are not increasing & are not likely to until after the New Year.

Potters Ore. Fair sales to Belgium & Small sales in England have been made. We could if sales could be got sell at least three times the quantity of Potters ore.

Witherite. None produced.

General. There is no falling off worth reporting in the grade ore mined & milled but with lead below £20 per Ton it is impossible to meet expenses neither can I see how the grade is likely to improve until we cut richer ore. The position is causing us much anxiety.

A.T.

# Roederup Tilt Mine

November 1937.

Development footage. - 27 feet - 8.22 metres.

Development rise from 20 fathom level  
W. Robinson and partners. 54 days worked  
 Decks  

	L	H	SF	SM	N	CF	CH	
Rise	21	x 7	= 147	13.66	x 5	= 68.3	= 20.81	} @ days wages.
Drift	6	x 6	= 36	3.34	x 5	= 180	= 2.09	
						<u>915</u>	<u>25.40</u>	

Drainage to mill - rise  
 Wages paid £ 24-6-0 Cost per cu. m. 18/4

Wob flat No 1 North.

C. R. Farmley and partners.

80 days worked

	L	N	SF	SM	H	CF	CH	
	12.5	x 34	= 462.5	42.96	x 7 1/2	= 346.9	= 98.20	} @ 30/- per fathom

Drainage to mill - 21 tons

Total money £ 36-5-0  
 Less cost. £ 11-3-4  
£ 25-1-3  
 + £ 4-18-4 make up

Cost per cu. m. 6/1

Wob flat No 2 North.

W. Robinson and partners

80 days worked

	L	N	SF	SM	H	CF	CH	
	14.5	x 32.5	= 471.25	43.74	x 8	= 3740	= 106.74	} @ 30/- per fathom

Drainage to mill - 230 tons

Total money £ 39-5-0  
 Less cost. £ 9-4-3  
£ 30-0-9

Cost per cu. m. 5/4

No 9 flat west

C. Peader and partners

106 days worked

	L	N	SF	SM	H	CF	CH	
	13.5	x 36	= 486	45.15	x 15	= 7290	= 206.41	} @ 36/- per fathom

Drainage to mill - 412 tons

Total money £ 92-9-4  
 Less cost. £ 10-4-3  
£ 82-5-1

Cost per cu. m. 8/-

No 4 flat West

J. L. Rose and partners

74 days worked

L W SF SH H CF CH } @ 32/6  
 $18 \times 20.5 = 369 = 34.28 \times 13 = 444.7 = 135.82$  per fathom

Tonnage to mill = 2.46 tons

Total money £ 54-3-4  
 Less costs: £ 6-3-6  
£ 47-19-10

Cost per cu. m. 7/1

No 9 flat West

J. Milbarn and partners

77 days worked

L W SF SH H CF CH } @ 30/ per fathom.  
 Flatt  $8 \times 13.5 = 108 = 10.03 \times 14 = 140.4 = 51.98$   
 Shading  $17 \times 12.5 = 212.5 = 14.73 \times 14.5 = 213.585 = 27.67$   
279.2 79.65

Tonnage to mill = 11.5 tons

Total money £ 29-0-0  
 Less costs: £ 5-6-6  
£ 23-13-6  
 + £ 5-4-0

Cost per cu. m. 7/4

West flatter.

J. Dackin and partners

57 days worked (part time

L W SF SH H CF CH } filling found ~  
 No 6 flat West  $12 \times 6 = 72 = 6.68 \times 8.5 = 56.78 = 17.33$  (covering house).  
 $12 \times 3 = 36 = 3.34 \times 4 = 13.36 = 4.13$  @ days wages.  
 Top flat No 3 West  $3 \times 11 = 33 = 2.94 \times 6 = 17.64 = 5.60$   
106.2 30.06

Tonnage to mill = 7.6 tons

Total money £ 21-7-6  
 Less costs: \_\_\_\_\_  
 \_\_\_\_\_

Cost per cu. m. 14/3

East flatter.

Thos. Bursby and partners

106 days worked

L W SF SH H CF CH } @ 32/6  
 $20.5 \times 27 = 553.5 = 51.42 \times 11 = 565.62 = 172.38$

Tonnage to mill = 3.66 tons

Total money £ 68-16-10  
 Less costs: £ 17-3-9  
£ 51-12-1

Cost per cu. m. 6/

N<sup>o</sup> 2 flat west.

G. Burwick and partners

51 days worked

L	W	SF	SH	H	CF	CH
18	x 19	= 342	= 31.77	x 11.5	= 3933	= 111.36
3	x 9	= 27	= 2.51	x 2.5	= 68	= 1.90
					<u>4001</u>	<u>113.26</u>

Tonnage to mill = 247 tons

N<sup>o</sup> 2 flat north.

J. Johnson and partners

53 days worked

These two flats were so close together that the ground broken became mixed into one heap and the total money made has been equally divided amongst the men of both contracts.

L	W	SF	SH	H	CF	CH
19.5	x 19	= 370.5	= 34.42	x 12	= 4446	= 125.88
1.5	x 4	= 6	= 0.56	x 10.5	= 63	= 1.78
					<u>4509</u>	<u>127.66</u>

Tonnage to mill = 248 tons.

Total money £41-2-0

Less cost. £23-7-0  
£17-5-0

Cost per cu. m. 5/4

## Rodderup Fell Mine & Mill

Mine. The mine output for Nov. was 2280 tons of ore. The value of the ore recovered on the mill was 5.01% which was just slightly less than the recovery in Oct. The lower value was caused by two "Flats" in the W section dropping off in value & two "Flats" in the E section where we had been mining good values Iron & Copper Pyrites instead of Galena. Towards the end of the month a narrow string crossed these "Flats" & the ore changed from Pyrites to Galena. It seems that values may improve during Dec. unless a change occurs elsewhere.

The rise which we have put up through the "Whin" from the 20 fathom level & which has now reached a height of over 60' for the purpose of proving if the Limestone extends uniformly to that *point* contained "Flats" was temporarily stopped at the end of the month. X cuts commenced to determine the positions. We expected to have proved if the Limestone existed before the end of Nov. Owing to the lower grade of the ore, tonnage sent to the mill was less than it would have been. More picking was done underground. Had the value remained at about 6 to 7% the monthly tonnage would have been not less than 2500 Tons the output we hoped to get. When the values return to normal we shall be able to produce 2500 Tons per month.

As in the case of Nentsbury the drop in the price of lead synchronising with the drop in values has caused us much anxiety. It is to be hoped that both price & grade will improve shortly.

Mill. The Mill continues to do good work & was never on as good condition as at present. Early in 1938 we shall try to erect the other Slime Table of "James" make now in Rampgill Washing Floor.

The total mill space will then be filled with modern concentrating machinery.  
A.T.



# Report on the Nenthead Mines December 1937

## Report on the Nenthead mines

December 1937

	<u>Nenthead</u>	<u>Rampgill</u>	<u>Rodderup</u>	<u>Totals</u>
Ore mined	1131 Tons	One steam engine	1932 Tons	3063 Tons
Ore milled	1131 "	run 7 hours daily.	2097 "	3228 "
Crushed galena	63.25	One fuel oil engine	122.25	185.5
% of galena	5.59	run 12 hours	5.78%	5.59
Blende crushed	10.55	daily.	—	10.55 Tons
% of blende	0.93		—	0.93%
Hours worked	291		334	291
Cost per hour	3.88		6.28	3.88

## Stocks

	<u>Nenthead</u>	<u>Rampgill</u>	<u>Rodderup</u>	<u>Wellhope</u>	<u>Totals</u>
Crude ore	oil	oil	233	2300	2530
Waste blende	1097.1	250	150	oil	1497.1

Rough blende 35,291 Tons  
 fine blende 37,900 "  
 Galena at Nenthead 30.88 Tons  
 Do at Rodderup 32.20 " Do " " Rodderup 156.150 "

Coal consumed at Rampgill 20 Tons  
 Fuel oil " " 7 "  
 Do " " Nenthead 3 "  
 Do " " Rodderup 3.5 "  
 Units of electricity consumed in Rodderup mine 35,746 units.

Compressed air produced at Nenthead & Wellhope 1100 cu ft per min.  
 Pressure 80 lbs at the face.

Compressed air produced at Rodderup 1200 cu ft per min.  
 Pressure at the face about 80 to 82 lbs.  
 A.T.



Table Set for No. 11

Dr. Revenue

Sheet No. 11

December 1912

Name of Unit	Previous from the C.R.		Galena		Values		Previous from the C.R.		Blacks		Values		Previous from the C.R.		Values	
	bu. ft.	thrs.	bu. ft.	thrs.	bu. ft.	thrs.	bu. ft.	thrs.	bu. ft.	thrs.	bu. ft.	thrs.	bu. ft.	thrs.	bu. ft.	thrs.
Depot Unit	2352	202	32204	1763												
Gov V.S. of R.	-	-	72107	4616												
Lincoln Unit	4168	231	-	-												
Liverick Unit	2262	111	13181	738	9929	347										
1st Sun Unit	-	-	904543	50234	904543	50234	904543	50234	904543	50234	904543	50234	904543	50234	904543	50234
2nd Sun Unit	2712	206	21615	4341	77903	4336	81616	4336	77903	4336	77903	4336	77903	4336	77903	4336
High Prairie	1753	97	53353	2427	36630	2330	33353	2427	36630	2330	36630	2330	36630	2330	36630	2330
Frederick Unit	963	23	237635	21394	436367	21351	437238	21394	436367	21351	436367	21351	436367	21351	436367	21351
	12991	1000	2534025	26945	1670119	35176	262181	26945	1670119	35176	262181	26945	1670119	35176	262181	26945
Admiralty	2913	100														
	20902	114.9														

Name of Unit	Galena		Values		Blacks		Values		Blacks		Values	
	bu. ft.	thrs.	bu. ft.	thrs.	bu. ft.	thrs.	bu. ft.	thrs.	bu. ft.	thrs.	bu. ft.	thrs.
Depot Unit	32204	1763	8									
Gov V.S. of R.	72107	4616	8	231								
Lincoln Unit	-	-										
Liverick Unit	9929	347	8	24								
1st Sun Unit	904543	50234	8	2512	904543	50234	8	2512	904543	50234	8	2512
2nd Sun Unit	77903	4336	6	260	77903	4336	6	260	77903	4336	6	260
High Prairie	36630	2330	6	140	36630	2330	6	140	36630	2330	6	140
Frederick Unit	436367	21351	8	1067	436367	21351	8	1067	436367	21351	8	1067
	2534025	26945	4005	4325	2534025	26945	4005	4325	2534025	26945	4005	4325

Development forage: 100

C.R. by Development: 212



# Ventbury Mine

December 1934.

Development footage - 100 feet - 30.78 meters.

Calculated inches of galena - 1"

S. Vein East in the top random. Blende witherite + some galena  
Jacob. Grossin and partner. 47 days worked

L H SF SH W CF CH } @ days wages  
 Mine 35 x 7 - 245 - 22.76 x 7 - 1715 - 48.56

Tonnage to mill - nil.  
 Wages paid £ 21-3-0

Cost per cu. m. 8/8

Boundary rise west in the low flat no v. cluss.

C. Hadspeeth and partner.

48 days worked

L H SF SH W CF CH } @ days wages  
 Mine 65 x 7 - 455 - 42.27 x 5 - 2275 - 64.41

Tonnage to mill - nil

Wages paid £ 22-6-0

Cost per cu. m. 6/11

L. Vein East portion South of S2. in the top flat 1" galena in 3 strings.

G. Short and partner.

41 1/2 days worked.

L H SF SH W CF CH } @ days wages  
 31 x 8 - 248 - 23.04 x 6 - 1488 - 42.13

Tonnage to mill - 47 tons

Wages paid £ 16-14-0

Cost per cu. m. 4/11

L. Vein South of S2. West portion in the top flat 1 1/2" galena disseminated.

Geo. Hoffalt and partner.

46 3/4 days worked.

L H SF SH W CF CH } @ days wages  
 14 x 27 - 294 - 27.31 x 6 - 1464 - 49.95

Tonnage to mill - 85 tons

Wages paid £ 18-14-0

Cost per cu. m. 7/6

S2. Vein west of L. Vein in the top flat 2 1/2" galena disseminated + blende

J. Richardson

24 days worked

L H SF SH W CF CH } @ days wages  
 16 x 15 - 240 - 22.29 x 8 - 1920 - 54.36

Tonnage to mill - 135 tons

Wages paid £ 9-12-0

Cost per cu. m. 3/6

2.

S<sub>2</sub> Vein East of L. Vein in the top flat 1 1/2' galena disseminated + blende  
A. Penstock and partner 42 3/4 days worked

	L	H	SF	SH	W	CF	CH
	22	8	176	16.35	8	1408	39.86
Drine	6	8	48	4.46	8	384	10.87
						1792	50.73

Wages paid £17-2-0      Tonnage to mill - 86 tons      Cost per cu. m. 6/9

D. Vein South of S<sub>2</sub> in the top flat 1 1/2' galena on two strings  
W. Rönisch and partner 45 3/4 days worked.

	L	H	SF	SH	W	CF	CH
Drine	40	7	280	26.01	5	1400	39.64

Wages paid £18-6-0      Tonnage to mill - 69 tons      Cost per cu. m. 9/3

D. Vein between St. Rönisch & St. Vein in the low flat 3' galena on 5 ribs.  
T. Sandspelt and partner 48 1/4 days.

	L	H	SF	SH	W	CF	CH
Drine	23	14	322	29.91	6	1932	54.71

Wages paid £19-6-0      Tonnage to mill - 162 tons      Cost per cu. m. 7/1

D. Vein string between St. R. & T.V. in the middle flat 1' galena on 1 rib.  
Mr. Short and partner 26 1/4 days

	L	H	SF	SH	W	CF	CH
Drine	10	12	120	11.15	6	720	20.39
Assess	10	5	50	4.64	6	300	8.49
						1020	28.88

Wages paid £10-12-0      Tonnage to mill - 39 tons      Cost per cu. m. 7/4

Sinclair Vein string South of T. Vein in the middle flat 3' galena on 2 ribs.  
C. Stout and partner 47 3/4 days

	L	H	SF	SH	W	CF	CH
Heading	4.5	7	31.5	29.26	26	1890	53.52
Drine	16.5	7	115.5	11.73	5	578	16.35
						2468	69.87

Wages paid £20-0-0      Tonnage to mill - 190 tons      Cost per cu. m. 5/9

3.

Sincor Vein string in the top flat  $1\frac{1}{2}$ " galena as 3 rib.  
H. Keilly and partners 38  $\frac{1}{4}$  days

	L	H	SF	SH	W	CF	CH	
Heading	16	x 14	= 224	20.81	x 6	= 13.44	= 38.05	} @ days wages
Drive	10	x 7	= 70	6.50	x 5	= 35.0	= 9.9	
								1694 47.95

Wages paid £15-6-0      Tonnage to mill - 79 tons      Cost per cu. m. 6/5

T. Vein slope in the low flat 2" galena as 1 rib.  
L. Riverick and partners 28  $\frac{1}{4}$  days worked

	L	H	SF	SH	W	CF	CH	
16 x 8	= 128	11.89	x 6	= 768	= 21.74			} @ days wages

Wages paid £11-10-0      Tonnage to mill - 50 tons      Cost per cu. m. 10/4

String aside of L. Vein from H.R. in middle rambles 1" galena as 2 rib.  
J. A. Seckering and partners 41 days worked.

	L	H	SF	SH	W	CF	CH	
Heading	30	x 13	= 390	36.23	x 6	= 2340	= 66.25	} @ days wages
Lead	14	x 7	= 98	9.10	x 6	= 588	= 16.65	
								1752 49.60

Wages paid £16-8-0      Tonnage to mill - 50 tons      Cost per cu. m. 6/4

Admiralty Concessions in the top flat Blende + some galena  
E Graham and partners 90 days worked

20 x 7	= 140	12.01	x 13	= 1820	= 51.52	} @ days wages		
14 x 7	= 98	9.10	x 6	= 588	= 16.65			
Rise	10	x 6	= 60	5.57	x 6		= 360	= 10.18
Drive	5	x 7	= 35	3.25	x 5		= 175	= 4.95
								2943 83.30

Wages paid £25-14-6      Tonnage to mill - 134 tons      Cost per cu. m. 2.6 1/2

# Roddens Fell Mine

December 1937

Development footage - 28 fms. 8.52 mch.

Development in East End 20ft level							Dead
<u>J. Robinson and partner</u>							47 days worked
	L	W	SF	SH	H	CF	CH
Rise	14	x 7	= 28	- 2.6	x 5	= 140	= 3.96
Drift	14	x 6	= 102	- 9.44	x 5	= 510	= 14.44
Shall	4	x 8	= 56	- 5.20	x 12	= 642	= 19.03
						<u>1322</u>	<u>37.43</u>

@ day wages

Tonnage to mill - nil

Wages paid £20-6-6

Cost per cu. m. 10/10

## West Alatto

Top flat No 1 East							
<u>C.R. Parmenter and partner</u>							72 days worked.
	L	W	SF	SH	H	CF	CH
	13	x 36	= 468	- 43.48	x 7.5	= 3570	= 99.38

@

Tonnage to mill - 194 tons

Total money £36-10-0

Less conts. £9-4-0

£27-6-0

Cost per cu. m. 5/6

## Top flat No 2 East

<u>J. Atkinson and partner</u>							54 days worked.
	L	W	SF	SH	H	CF	CH
	10.5	x 2.2	= 231	- 21.41	x 11	= 2541	= 71.95

}

Tonnage to mill - 180 tons

## East flat No 2 East

	L	W	SF	SH	H	CF	CH
	4.5	x 32	= 144	- 13.37	x 8	= 1152	= 32.61

}

Tonnage to mill

Total money £38-10-0

Less conts. £6-14-3

£31-15-9

Cost per cu. m. 4/1

Flat No 9 West.

A. Beadle and partners

86 days worked.

$$\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 12 \times 34 = 408 = 37.9 \times 15 = 612.0 = 173.24 \end{array} \quad \left. \vphantom{\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 12 \times 34 = 408 = 37.9 \times 15 = 612.0 = 173.24 \end{array}} \right\} @$$

Tonnage to mill = 411 tons

Total money £ 69-1-3

Less costs £ 7-19-6

£ 61-1-9

Cost per cu. m: 7/11

Flat No 4 West.

Harold Lowe and partners

69 days worked.

$$\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 9 \times 14 = 126 = 11.7 \times 17 = 214.2 = 60.65 \\ 34 \times 20 = 680 = 63.17 \times 11 = 2720 = 77.02 \end{array} \quad \left. \vphantom{\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 9 \times 14 = 126 = 11.7 \times 17 = 214.2 = 60.65 \\ 34 \times 20 = 680 = 63.17 \times 11 = 2720 = 77.02 \end{array}} \right\} @$$

4862 137.67

Tonnage to mill = 302 tons

Total money £ 54-19-4

Less costs £ 5-2-6

£ 49-17-1

Cost per cu. m: 7/5

Top flat No 3 West.

V. Dackin and partners

65 days worked.

$$\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 15.5 \times 28.5 = 441.75 = 41.03 \times 9.5 = 419.6 = 118.81 \end{array} \quad \left. \vphantom{\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 15.5 \times 28.5 = 441.75 = 41.03 \times 9.5 = 419.6 = 118.81 \end{array}} \right\} @$$

Tonnage to mill = 191 tons

Total money £ 44-9-6

Less costs £ 6-18-0

£ 37-11-6

Cost per cu. m: 6/4

Top flat No 9 West.

J. Milburn and partners

70 days worked.

$$\begin{array}{r} Roads 29.5 \times 21 = 619.5 = 57.54 \times 11 = 2478 = 70.17 \\ Bricks 40.5 \times 21 = 850.5 = 79 \times 14.5 = 3827 = 108.36 \end{array} \quad \left. \vphantom{\begin{array}{r} Roads 29.5 \times 21 = 619.5 = 57.54 \times 11 = 2478 = 70.17 \\ Bricks 40.5 \times 21 = 850.5 = 79 \times 14.5 = 3827 = 108.36 \end{array}} \right\} @ 25\% per ft. m.$$

6305 178.53

Tonnage to the mill = 103 tons

Total money £ 61-4-2

Less costs £ 4-3-0

£ 57-1-2

Cost per cu. m: 6/5



## East Flatt.

Flatt No 1 West.

Thos Buskby and partners

72 days worked.

	L	W	SF	SH	H	CF	CH
Flatt No 1	14.5	x 29.5	= 427.45	= 39.71	x 11	= 470.5	= 133.22
Roof	11	x 14.5	= 159.50	= 14.81	x 4	= 63.8	= 18.06
						<u>534.3</u>	<u>151.28</u>

Tonnage to the mill - 152 tons

Total money £ 64-2-3  
Less costs £ 12-7-6  
£ 51-14-9

Cost per cu. m. 6/10

Flatt No 2 West.

Geo Barwell and partners

70 days worked.

	L	W	SF	SH	H	CF	CH
14.5	x 25	= 362.5	= 33.64	x 12	= 435.0	= 123.16	

Tonnage to mill - 192 tons

Total money £ 46-15-2  
Less costs £ 11-18-0  
£ 34-17-2

Cost per cu. m. 5/8

Flatt North.

Geo Hind and partners

	L	W	SF	SH	H	CF	CH
14.5	x 30	= 435	= 40.41	x 11	= 478.5	= 135.48	

Tonnage to mill - 196 tons

Total money £ 53-17-11  
Less costs £ 10-18-6  
£ 42-19-5

Cost per cu. m. 6/4



**ANNUAL REPORT of the NENTHEAD MINES  
For 1937**

**NENTSBURY MINE**

I regret I am unable to state the quantity I estimated to be mined during 1937, and the production therefrom. All those papers, containing this information, were destroyed in the Fire when the Surveying Office was burnt in October last.

The actual quantity of Ore mined during 1937, was 12120 Tons. The actual output of Galena Concentrates was 691.600 Tons. The percentage recovery was 5.70% The quantity of Blende concentrator recovered amounted to 92.746 Tons. The percentage recovery was 0.76%. The quantity of Gravel sold was 2761 Tons 3 cwt. Witherite produced and sold was 12.2 Tons.

Ore Reserves. The Ore Reserves were calculated Dec. 24th 1936 to amount to 94662 Tons. The calculated Reserve tonnage was given as follows: — Ore containing Blende-Witherite and Galena 83,357 Tons. The Reserves in the Lead Veins were calculated to be 11305 Tons.

On December 24th 1937, the Reserve tonnage is estimated to amount to 85176 Tons. The Mixed Ore reserves account for 75920 Tons and the Ore in the Lead Veins to 6926 Tons.

Although 12120 Tons have been extracted from 94662 Tons in Reserve, leaving in Reserve, 82542 Tons, we consider that there are 85175 Tons in reserve. The reason why 12120 Tons have been mined during the year, mainly from the Lead Veins, from a calculated tonnage of only 11305, in December 1936, and we still have 6926 Tons in Reserve, is owing to the quantity of ore found in side-strings in Sincay Vein and other Veins. I consider it will be possible to mine the 6926 Tons from the Lead Veins on average. Some veins may yield less than the quantity stated in the Reserve Sheet, but others will in all probability yield more.

Development. During the year, the Development footage was 844 ft., or 257.22 metres. S 1 E was driven 371 ft., or 113.06 metres. The Vein contained Witherite

Blende and traces of Galena. Where seen in the drive, the Ore was unpayable. The Vein is a wide one.

From a rise near the boundary, from the Horse Level and in the bottom of the Limestone, a drive was made E. 283ft., and a rise put up 22 ft. A drive was also driven W. from the same rise, from the Horse Level 108 ft. The total footage developed in this area was 125.86 metres. The object in driving E. & W. in the Limestone was for the purpose of cutting an E. & W. Vein reported as having intersected the High Raise Vein in this area. Nothing was discovered by December 24th. We shall continue driving E. a further 100 to 150 ft., or 30 to 45 metres, to prove if the "T" Vein has intersected High Raise, and has crossed over to the S. side.



A Rise was put up from a X-cut N. from the Horse Level, and the farthest point E. to prove if a small Vein seen in the X-cut was the "T" Vein. The Rise was risen on the small vein. The Vein was unpayable, and when the Rise reached the top random, work was suspended.

#### Outlook for 1936 and Recommendations.

It is obvious that the outlook for Nentsbury is not encouraging, and particularly is it discouraging if Lead and Zinc are likely to remain below an average of £20. per ton.

The ore Reserves indicate we may be able to continue as at present for upwards of one year, during which the Ore in the Lead Veins would be exhausted. To attempt to treat the Mixed Ore without a Flotation Plant, would result in a heavy loss of the mineral content, and, possibly, a heavy financial loss. Unfortunately, no payable ore was discovered during the year, by development, and in the Forebreast E the Black Bed is now in the roof of the level. Considering that during the past 5 years the S 1 E level has been driven approximately 800 metres in a vein of unusual width, where the two walls N. & S. have never been seen at the same time, it is a matter for careful consideration if it would not pay to stope given lengths at intervals in the 800 metres length. If the ore was not payable, it could be stored in the dump at Wellhope Shaft. It is possible that over that length there may be, either on the N. or S. side, of the Vein, Ore that might be payable, and it is also possible that a N. & S. Vein may be in existence, and not seen in the Vein when the level was driven. In 1923-24, this actually occurred, and "Sincay" "Dupont" and "Cox" Veins were not seen, or, if seen, of no importance when the Horse Level was driven on High Raise Vein. The cost of developing in this manner would not be more than driving two or three forebreasts.

Another matter we might consider, would be to bore from the middle random on S 1 Vein, N. and S., and prove if S 2 exists S., and if High Raise and "T" Veins exist N., and are payable. The bore holes could be put out from the Horse Level, where the Level is in the bottom of the Limestone, and about 200 Metres W. of the Forebreast.

Replying to your Questionnaire of Jan. 11<sup>th</sup> 1938.

#### 1. DEVELOPMENT. (Expenses and Results)

To resuscitate Nentsbury Mine, the Company should allocate as much funds as it can afford for Development.

S 1 E Forebreast is in the Black Bed - consequently all the Limestone is below the level of the drift. The cost of driving this level is becoming heavy, the face of the drift is now more than 1/2 mile from Wellhope Shaft, and about 2 miles from the mouth of the level. Ventilation is bad, and transport costs high. Miners having to walk 2 miles each day means about 1½ hours of the shift is occupied

in travelling and with 1/2 an hour for food, the actual working time is not more than 6 hours, and often less.

I suggest that If funds are available, either Bore-holes be put out by Diamond Drilling N. and S., or X-cuts be driven from a point in the Horse Level (indicated on the plan attached) to prove if S 2 exists South and is payable, and N. to prove the existence and value of "High Raise" and "T" Veins. The development of "T" Vein E. from Robinson Vein should also be considered, and any other points in the mine worth considering. Not less than £2000 will be required for this work. It is impossible to state what the results may be. I also suggest, as stated in a previous paragraph, that Headings at intervals in a given length of S 1 should be worked.

## 2. EQUIPMENT (Expenses and Results)

It is not possible to estimate the cost of equipment until a definite programme has been reached. If Nentsbury is closed as a producing mine, and Development only is carried on, the cost of equipment will be limited to replacements and maintenance.

If Flotation is considered, the cost of a Flotation Plant must be added, and this will now cost more than the estimated cost a year ago, and much more than the estimated cost 2 years ago. The estimated cost of this has been regarded at about £5000 I do not consider it can be estimated to cost less.

## 3. Technical Results, Mine & Mill Yield

It will be gathered from the Monthly Reports and what is said in this report under Ore Reserves, that Nentsbury Mine, with the Ore in sight, cannot maintain the Mill for more than a year, from the Lead Veins, and probably less. The recovery is not likely to exceed 6% Galena.

## 4. Production & Cost (Technical Expenses, Labour, Wages, and Standing Charges.)

An estimate of production and cost, will depend upon how long the mill can be supplied with about 1000 Tons of Ore per month of about 6% Galena, and what the average price of Lead will be for 1938.

If the price of Lead is taken at £16. per ton, the value of a ton of concentrates will be about 200 Sh. or 2/- per cent. The value of a ton of ore will therefore be 12/-. The value of Blende recovered and Gravel sold would amount to about 1.5/- per ton, making a total value per ton of ore, of 13.5/-. The costs would amount to about 20/- per ton. The loss would therefore be 6.5/- per ton, or multiplied by 1000, 6500/- per month, or £325.

If the average price of Lead was £20. per ton, the value per ton of concentrates would be 280/- or 2.8/- per cent, making the value per ton of ore 16.8/- plus 1.5/- for Blende and Gravel, equals 17.3/- Per ton. The loss would be 2.7/- per ton, equals 2.7 x 1000 per month equals 2700/- or £135 per month.

If the mine was closed the Standing Charges would be reduced from 3.54, less Royalty 1.28, to 2.26/- or, in cash, £1400 per annum (approx.) and to this sum must be added the £2000 for Development, plus maintenance cost of not less

than £600, equals a total of £4000. There is little to choose between going on and losing money when the prices are low, or closing down and developing, except that any payable ore discovered by Development will be an asset sooner or later. On the other hand, the frequent dislocation re: Staff and Labour will militate against the running of the mine later if and when ore is discovered.

#### 5. Final results.

I consider the final results are as stated above, viz:- Nentsbury will continue to lose if the price of Lead and Zinc remain below £22. per ton when mining the Lead in sight, and that the monthly loss will be about £325 when Lead is £16. per ton, and less should the price rise, and such loss will be fairly proportionate to the price of Lead.

#### 6. Prospects for 1938.

The prospects for 1938, summarised, are:-

Nentsbury must be rapidly and extensively developed to prove if mineral exists. This will depend upon the Company's grant for the purpose. It might be worth considering that during the past 14 years, when production was limited to 13 years, over 38000 Tons of Galena Concentrates have been produced, and although the prospects are not encouraging, there may be in the area, further quantities of payable ore.

The Company must, in my opinion, face an expenditure for rapid development on a large scale, and equipment for Flotation, one or both, or 1938 will definitely (unless richer ore is discovered more by chance than by plan) see, the end of the mine.

## RODDERUP FELL

As in the case of Nentsbury, all papers relating to previous estimates were destroyed in the Fire in October.

During 1937, 18656 Tons of Ore was mined, and 18588 Tons crushed for a recovery of 1107.7 Tons of Concentrates. The percentage of recovery was 5.90%.

Gravel sales for the year amounted to 4450 Tons 15 cwt.

It is only fair to point out that the method of calculating tonnage was altered during 1937, and whereas previously all stones (deads) picked off in the Mill, were deducted from the tonnage recorded as crushed, it was decided that all tonnage sent out of the mine should be regarded as crushed. I calculate that not less than 10% is picked off at the Mill. If 10% was deducted, the Mill would be credited with 18588 lose 10%, equals 16729 Tons, divided by 1107.7, and the percentage recovered would be 6.6% compared with 7.98% recovered in 1936.

On February 24th 1937, a contract was signed with the Mid-Cumberland Electricity Co., Ltd. to supply Electric power and install machinery in Rodderup, and promises given, in writing, subject to deliveries etc. that the work should be completed by the end of May actually the work was completed for testing, only be the end of August. Up to September the Mill was running one shift only. We commenced Milling two shifts in October, and from then to the end of 1937, except when work was dislocated owing to a snow-storm in December, the output increased monthly. Unfortunately, the grade of the ore dropped, and the output of Galena was affected, and this occurred just when the price of Lead was at its lowest. The electric installation, consisting of a concrete house outside for switch-gear, 1375 yards of heavy Cable to carry electric energy at 10,000 volts, 2 new motors of 130 and 100 H.P. respectively and made by Metropolitan-Vickers Electric Co., a Transformer, Switchgear etc. etc. all made by the same Company, and 2 Compressors, one now by Broom & Wade, was completed, and is now running satisfactorily.

Ore Reserves. The question of Ore Reserves is very difficult to estimate owing to the formation of the deposit. During the year, we have opened up Flats, E. and N. of No. 1 Shaft. This area is now supplying 30% of the tonnage to the Mill. It will not be difficult to supply the Mill with 25000 Tons per annum for some years to come.

I consider 100,000 Tons an under-estimate of the tonnage in Reserve, and I further consider the Ore Reserves are more than they were a year ago. The value I would put at from 6.0% to 6.5%.

Re: the estimated ore in the Flats. The value cannot be closely estimated, as it depends upon the ore broken from week to week, and really, from day to day. It is probable that for say 3 months, the ore may be down to 5%, and the following 3 months, up to 7% or more, and for no particular reason that can be given. Only the average for a year can be taken. Further it is not possible,

although the utmost care is taken, to so mine the ore that an average grade can be maintained.

#### Outlook for 1938 & recommendations.

The replies are given to your questionnaire dated January 11th 1938.

##### 1. Development, Expenses and Results.

Development at Rodderup during 1938 should be devoted to opening up the Central Flats, pumping out the No.3 Shaft, and draining the area, and, as soon as possible, opening up the West Flats. The tonnage should then be increased to keep the Mill running 3 shifts.

I would point out that the ore from the West Fats will probably cost more than the ore now being mined, particularly if the ore is dropped to the 20 fathom level, then trammed to and hoisted through No.3 Shaft. Past experience taught that the cost would amount to upwards of 2/- per ton more, consequently the ore on average should be 1% at least richer to moot the cost. It is difficult to plan a programme for Rodderup, as so much depends upon the formation and deposition of the ore, and the price of Lead.

I consider a sum of at least £1000 should be allowed for development. The results, I do not think, will be in doubt, and in all probability the Oro Reserves will be increased by the end of 1938, if values are maintained even after 25000 Tons is mined.

##### 2. Equipment (Expenses and Results

Here also, until a programme has been decided, it is impossible to estimate how much will be required. In your letter of January 6<sup>th</sup>, the question of sinking down through the Melmerby Scar was raised. The depth of the shaft would have

to be sunk to get to the bottom of this stratum is about 400 ft., or about the depth of Wellhope Shaft. The Melmerby Scar is 132 ft. thick, and the strata from the Middle of the Jew Limestone to the top of the Melmerby Scar, 268 ft. The cost of equipment if this is undertaken, would be for additional pumping plant, electric hoist, ropes and cages, and reconditioning and clearing the shaft, not less than £1000. This is a very wet shaft and to sink it 400 ft. will cost about £5000, always assuming that the labour is available for this work and for maintaining the mine. Also, this shaft is now used for hoisting the ore from this area. If this work is not undertaken the cost of equipment for 1938, should not exceed £600 to £750 to include ropes, additional rock drills, and Electric or Compressed Air Winches. The results would be increased tonnage, and by the end of 1938 it should be possible to mine a full average output of 2500 Tons per month, or 30,000 Tons per annum.

##### 3. Technical Results (Mine & Mill Yields Recovery etc.)

The production is estimated at 25,000 Tons of ore at from 6 to 6.5% recovery. Taking Lead at £16. per ton, 1% equals 2/-, multiplied by 6 equals 12s/-, plus gravel and Silver value 1/-, equals 13/-. If the recovery is 6.5% the total value is

14/- per ton. At £20 per ton, the value would be 2.8/- per cent, x 6, equals 17.8/- plus 1/- equals 18.8/- per ton. Between £16 and £20 per ton, the value would vary in proportion to the price of Lead.  
Taking costs at 15/- per ton, and a monthly production of 2500 Tons of ore the results would be as follows: -

Price of Lead	% Galena	Value per ton	per ton	per month. (2500Tons)
£16	6.0	13s/-	3s/- loss	£250 Loss
£16	6.5	14s/-	1s/- loss	£125 Loss
£18	6.5	15.60/-	0.6s/- profit	£75 Profit
£20	6.5	18.80/-	3.8s/- profit	£475 Profit
£16	7.0	15.00/-	—	—
£18	7.0	16.80/-	1.8s/- profit	£225 Profit
£20	7.0	20.30/-	5.3s/- profit	£662.5 Profit

Technical expenses cannot be lowered, neither can wages during 1938. There is every possibility that there will be sufficient employment for all the able-bodied unemployed when the Sewerage Scheme is started. It is estimated that 100 men will be required for 12 months, of which from 60 to 80% will be recruited from Alston Labour Exchange.

The wage paid will be equal to what we pay underground workmen.

Standing Charges are likely to amount to the same average as during 1937, but may be however, lower by about 0.5s/- if the output is based upon 25000 Tons per annum, instead of 18656 Tons. Royalty will be about the same proportion, as also will Rates. Staff and Offices should be slightly less.

#### 5. Final Results.

The Final Results are really given in the replies to previous questions.

#### 6. Prospects for 1938.

The prospects for 1938 will depend upon the price of Lead, over which we have no control, and the percentage of Galena in the ore mined. We may be able to control, to some extent, the latter by picking etc., and endeavouring to work the richest parts of the Flats. As an experiment this is worth trying, but what the result may be is difficult to forecast. By close picking underground, deads are not transported at a cost of about 2s/- per ton, neither are they milled at a cost of about 2.5/- per ton. If for example 10% more was picked inside, than is now picked, the tonnage of 2500 Tons would be reduced to 2250 Tons, and assuming the grade broken to be 6% the grade would be raised to 6.6%.

The recovery from 2250 Tons of 6% equals 150 Tons of concentrates. The recovery from 2250 Tons of 6.6% would yield 148.5 Tons of Concentrates. At £10 per ton, the difference is £15. Against the £15, 2/- per ton would be saved in transport and say 2.5/- per ton milling, or 4.5/- total on 250 Tons, equals 1025/- or £51.25, a difference of £36.25.

On the other hand, the cost per ton of ore raised and milled would increase. To extract 2500 Tons of 6.6% ore, assuming that 6% ore was broken and 10% additional picking was done, would mean that say 2775 Tons would have to

broken to send the 2500 Tons to the Mill. This is important, and worth considering, but it does not seem to be the solution. The outlook, as stated, depends upon say Lead at £16. per ton, and on 8% ore, or Lead at say £17. per ton and a 7% ore.

I consider the outlook at Rodderup Is encouraging, and from a mining point of view, well, worth pursuing.

### **SCRAITH HOLE MINE**

During the year, 2707 Tons were mined and crushed from Scraith Hole for a recovery of 79.3 Tons of Lead Concentrates and 122.352 tons of Blende concentrates.

The percentage of recovery was 2.92% and 4.52% respectively.

Compared with the Ore extracted in 1936 there was a falling-off in Galena values from 5.75% in 1936 to 2.92% in 1937, and an increase in Blende values from 3.55% in 1936, to 4.52% in 1937.

Much work was done in the top random In the Eastern Section, and communication made with No.3 Rise. Cross-cuts were also driven N. from the branch or Vein to prove if the Flats extended N. nothing of value was found.

It Is very difficult to arrive at an opinion respecting Scraith Hole. For a considerable length, the V.M. Company in past years worked the so-called Vein and an area close to the Vein on the South Side, but in no case, did they appear to have done any work North, and from the work done in 1937, when two X-cuts of about 60 ft. each were put out N. and nothing discovered, it seems that from all that is known, and has been done to date, no payable mineral values exist N. It is my opinion that Scraith Hole Vein is a split, or off-shoot, from Guddamgill Vein. There were pockets where the ore found was payable, and, in a few cases, and for short distances, profitable, but taken over the whole area the mine cannot be regarded as payable.

Work was suspended in August 1937. Since then the mine has been inspected monthly, and is kept in condition for a cheap and quick resumption.

# Report on the Nenthead Mines January 1938

Report on the Nenthead Mines				
January 1938				
<u>Nenthead</u>	<u>Rampgill</u>	<u>Rodderup</u>	<u>Totals.</u>	
Crushed 1228 Tons	One steam	2320 Tons	3548 Tons	
Or milled 1228 "	engine of	2324 "	3552 "	
Blends used 77.75%	hours daily.	145.65 "	N 223 1/2 "	
% of galena 6.33%	One Fuel oil	6.26%	6.33% 6.26%	
Blends consumed 13.00 Tons	engine 1hr	-	13 Tons	
% of Blende 1.06%	hours daily.	-	N 1.06%	
Hours worked 317 hours		362 hours	317 362	
Tons per hour 3.87 Tons		6.42 Tons	3.87 Tons, 6.42 Tons.	
<u>Stocks</u>				
<u>Nenthead</u>	<u>Rampgill</u>	<u>Rodderup</u>	<u>Wellhope</u>	<u>Totals.</u>
Crude ore oil	oil	229 Tons	2300 Tons	Tons 2529
Blends witherite 1097.1	250	150 "	oil	1497.1
rough blende 6 Tons fine blende 11.957 Tons.				
Galena at Nenthead 21.156 Tons Patters ore at Nenthead 73.896 Tons Do at Rodderup 30.650 " Do " Rodderup 91.100				
Coal consumed at Rampgill 20 Tons Fuel oil " " 7 Tons Do " " Nenthead 3.5 " Do " " Rodderup 3.5 "				
Units of Electricity consumed in Rodderup mine 33,822. units				
Compressed air produced at Nenthead & Wellhope 1100 cu. ft. per min. Pressure 80 lbs at the face.				
Compressed air produced at Rodderup 1200 cu. ft. per min. Pressure at the face 80 to 85 lbs.				



January 1935											
Grana Values			P.R. Remaining			Blends Values			P.R. Remaining		
Previous Month's Bal.	Grana	Blends	Grana	Blends	Grana	Blends	Grana	Blends	Grana	Blends	Grana
bu ft	bu ft	bu ft	bu ft	bu ft	bu ft	bu ft	bu ft	bu ft	bu ft	bu ft	bu ft
188	31434	1765	25349	1543	4835	74445	4164	50234	914212	31234	912412
68	83058	4616	51558	4048	4835	74445	4164	4835	74445	4164	74445
154											
341	9846	544	3411	206	4835	74445	4164	4835	74445	4164	74445
	904212	50234	904212	50234	4835	74445	4164	4835	74445	4164	74445
181	45030	4835	44445	4164	4835	74445	4164	4835	74445	4164	74445
	41940	2330	41940	2330	4835	74445	4164	4835	74445	4164	74445
59	384318	21351	384318	21351	4835	74445	4164	4835	74445	4164	74445
991	1033165	80146	1018104	84339	4835	74445	4164	4835	74445	4164	74445
196											
1184											
Development - 89											
Development - 136											
Grana Values			P.R. Remaining			Blends Values			P.R. Remaining		
Previous Month's Bal.	Grana	Blends	Grana	Blends	Grana	Blends	Grana	Blends	Grana	Blends	Grana
bu ft	bu ft	bu ft	bu ft	bu ft	bu ft	bu ft	bu ft	bu ft	bu ft	bu ft	bu ft
188	31434	1765	25349	1543	4835	74445	4164	50234	914212	31234	912412
68	83058	4616	51558	4048	4835	74445	4164	4835	74445	4164	74445
154											
341	9846	544	3411	206	4835	74445	4164	4835	74445	4164	74445
	904212	50234	904212	50234	4835	74445	4164	4835	74445	4164	74445
181	45030	4835	44445	4164	4835	74445	4164	4835	74445	4164	74445
	41940	2330	41940	2330	4835	74445	4164	4835	74445	4164	74445
59	384318	21351	384318	21351	4835	74445	4164	4835	74445	4164	74445
991	1033165	80146	1018104	84339	4835	74445	4164	4835	74445	4164	74445
196											
1184											

# Kentbury Mine

January 26<sup>th</sup> 1938

calculated inches of galena 1.9 inches

development footage. for .12

Development Credit S.V. East in the top flat Blende: Withoute, some galena.  
J. Cousin and partner 40 days worked

	L	H	SF	SH	W	CF	CH	
Sweep	14	7	98	9.10	7	686	17.42	} @ days wages
Dive	20	7	140	13.01	5	700	17.82	
						1386	39.24	

Tonnage to mill - nil  
 Wages paid £ 18-0-0 Cost per cu. m. 9/2

Development Credit, Boundary Rise, in the low flat no values  
C. Hadspeeth and partner 50 days worked

	L	H	SF	SH	W	CF	CH	
Dive	75	7	525	48.77	5	2625	74.33	} @ days wages

Tonnage to mill - nil  
 Wages paid £ 26-5-0 Cost per cu. m. 7/1

L. Vein East portion South of S<sub>2</sub> in the top flat 1.5' galena disseminated.  
G. Short and partner 49 days worked

	L	H	SF	SH	W	CF	CH	
Dive	12	8	96	8.92	5	480	13.60	} @ days wages
Dive	37	9	333	30.93	3	999	28.28	
						1479	41.88	

Tonnage to mill = 49 tons  
 Wages paid £ 14-12-0 Cost per cu. m. 9/4

L. Vein West portion South of S<sub>2</sub> in the top flat 3' galena disseminated.  
G. Moffett and partner 47 3/4 days worked

	L	H	SF	SH	W	CF	CH	
	23	23	529	49.14	6	3174	89.88	} @ days wages

Tonnage to mill = 203 tons  
 Wages paid £ 14-2-0 Cost per cu. m. 4/3

S<sub>2</sub> Vein West of L. Vein in the top flatt 2.5 inches galena disseminated.  
V. Richardson 25 days worked

	L	H	SF	SH	W	CF	CH	
Heading	20	12	- 240	- 22.30	x 7	= 1680	= 47.57	} @ days wages
	Tonnage to mill - 106 tons.							
Wages paid	£ 11-0-0						Cost per cu. m.	4/2

S<sub>2</sub> Vein East of L. Vein in the tumblers 1.5 inches galena disseminated  
A. Armstrong and partner 50 days worked

	L	H	SF	SH	W	CF	CH	
Drive	45	x 7	= 315	- 29.06	x 5	= 1575	= 44.59	} @ days wages
	Tonnage to mill - 85 tons.							
Wages paid	£ 20-0-0						Cost per cu. m.	8/11 1/2

D Vein string south of S<sub>2</sub> Vein in the top flatt 1.5 inches galena as  
D. Liverick and partner 50 days worked (two sets)

	L	H	SF	SH	W	CF	CH	
Drive	37	x 9	= 333	- 30.93	x 5	= 1665	= 47.14	} @ days wages
	Tonnage to mill - 91 tons.							
Wages paid	£ 20-0-0						Cost per cu. m.	8/6

D Vein between H. Raise & S<sub>2</sub> Vein in the low flatt 1.5 inches galena as 3 sets.  
J. Haddock and partner 48 days worked

	L	H	SF	SH	W	CF	CH	
Drive	43	x 8	= 344	- 31.96	x 5	= 1720	= 48.71	} @ days wages
	Tonnage to the mill - 92 tons.							
Wages paid	£ 19-10-0						Cost per cu. m.	8/1

C Vein string north of H. Raise in the top flatt 1.5 inches galena as 3 sets.  
M. Short and partner 38 days worked

	L	H	SF	SH	W	CF	CH	
Drive	15	x 9	= 135	- 12.54	x 6	= 810	= 22.93	} @ days wages
Side	20	x 7	= 140	- 13.01	x 3	= 420	= 11.90	
							1230	34.83
	Tonnage to mill - 68 tons.							
Wages paid	£ 15-4-0						Cost per cu. m.	8/9

S<sub>2</sub> Vein string West in the middle flatt Dead.  
A. Kelly and partner 45 days worked

	L	H	SF	SH	W	CF	CH	
32 x 8	= 256	- 23.78	x 5	= 1280	= 36.24			} @ days wages
	Tonnage to mill - nil							
Wages paid	£ 18-0-0						Cost per cu. m.	10/1

Vein string south of T. Vein in the low flat 3" galena disseminated  
G. Stout and partner 49 <sup>3</sup>/<sub>4</sub> days worked

	L	H	SF	SH	W	CF	CH	
Heading	34	x 11	=	374	- 34.74	x 6	=	2244 - 63.54
	22	x 4	=	88	- 8.17	x 6	=	528 - 48.95
								<u>2772</u> <u>112.49</u>

} @ days wages

Tonnage to mill - 179 tons  
 Wages paid £ 14 18-6  
 Cost for cu. m: 5/1

T. Vein slope in the low flat 1.5" galena on one rib.  
L. Liverick and partner 27 days worked.

	L	H	SF	SH	W	CF	CH	
	22	x 8	=	176	- 16.35	x 6	=	1056 - 29.89

} @ days wages  
 Tonnage to mill - 58 tons  
 Wages paid £ 11-16-6  
 Cost for cu. m: 7/3

T. Vein string in the top flat 1.5" galena disseminated.  
H. Pickering and partner 44 days worked

	L	H	SF	SH	W	CF	CH	
Heading	19	x 13	=	247	- 22.94	x 6	=	1482 - 41.96

} @ days wages  
 Tonnage to the mill - 80 tons  
 Wages paid £ 17 12-6  
 Cost for cu. m: 8/5

Admiralty Concessions. in the top flat. Bland  
E. Graham and partner 99 days worked

Flat	28	x 15	=	420	- 39.02	x 7	=	2940 - 83.24
Drift	17	x 7	=	119	- 11.05	x 5	=	595 - 16.85
								<u>3535</u> <u>100.09</u>

} @ days wages

Tonnage to mill - 189 tons  
 Wages paid £ 28-11-6  
 Cost for cu. m:

## **General remarks re Mine & Mill**

Nentsbury Mine. The output from Nentsbury for January was 1228 tons of ore. Concentrates recovered amounted to 77.75 Tons of Galena 6.33% % Blende 1.06% the recovery of 6.33% compared with 5.39% in December for Blende 1.06% V 0.93% for December.

The improvement in grade must be regarded as temporary. Unfortunately no new deposits have been discovered, & no improvement in S 1 E can be reported. Work is spread over the mine in the Veins where the best grade galena ore can be found. Most of the Blende recovered is from ore mined in the Admiralty Concession but when considering the low price of Spelter the blende recovered & the small quantity of lead the ore mined is not payable.

Development. The total development footage for January was 89' = 27.11 metres. S 1 E was advanced 14' = 4.25 metres. The Vein contained blende & Witherite. The black bed is the roof of the level consequently the Limestone is practically below the floor of the level. Ventilation is not good & the miners demanding a guaranteed wage of 9/- per day & refusing to work for less they left the Co<sup>y</sup> Employ & work has since been suspended. In the drive E from the rise near the boundary the level was driven 75' = 26.51 metres. There is nothing in this drift which is being driven to prove if a N & S vein or string crosses about 150 farther E near where T vein intersected "High Raise".

Headings. There is no change of importance

Mill. Nothing to report. Results as usual.

Potters Ore. We have received good orders from Belgium & small orders from Messrs Ashby & Co.

Witherite. None produced.

Gravel Sales. We have tendered for substantial orders for gravel & in all probability shall receive some orders mainly for County Councils & contractors. There is very little doing at present.

A.T.

# Roddenup Fell Mine

January 26<sup>th</sup> 1936

Development footage = 6 feet - 1.82 mchrs.

Development Rise from 20 fm level

Deadr.

L. Watson and partners

8 days worked

L	W	SF	SH	H	CF	CH
6	5	30	2.79	6	180	5.09

Tonnage to the mill = nil

} @ days wages.

Wages paid

Cost per cu. m.

## Central Flatts East - Section

Thos. Bashby and partners

64 days worked.

L	W	SF	SH	H	CF	CH
16.5	13.5	222.75	20.68	3	668	81.91
31	14	434	40.32	10	4340	122.89
12	13.5	162	15.05	3.5	664	16.05
					5546	220.85

} @ 35/- per fathom.

Tonnage to mill = 246 tons

Wages paid total £64-13-11

Less costs: £9-18-9

£54-14-7

Cost per cu. m. 5/3

Geo. Barwick and partners

72 days worked

L	W	SF	SH	H	CF	CH
16	29	464	43.41	12	5868	154.66

} @ 30/- per fathom.

Tonnage to mill = 292.

Total money £64-13-4

Less costs: £12-11-9

£51-1-7

Cost per cu. m. 6/10

J. Atkinson and partners

63 days worked

L	W	SF	SH	H	CF	CH
12.5	24.5	312.75	31.84	11	3781	104.04

} @ 30/- per fathom

Tonnage to mill = 130

Total money £39-10-0

Less costs: £9-18-9

£29-11-3

Cost per cu. m. 7/6



Central Plate East (Continued)

Ch. Lind and partners (5 men) 112 days worked.  
 L W SF SH H CF CH  
 14 x 19.5 = 331.5 - 30.45 x 11 = 364.7 - 103.25  
 11.5 x 24 = 348 - 32.33 x 10 1/2 = 365.4 - 103.56  
 7301 206.81  
 } @ 32¢ per fathom.  
 Lounage to mill - 308 tons  
 Total money £ 81 - 1 - 11.  
 Less cost: £ 19 - 14 - 3  
 £ 61 - 7 - 1  
 Cost per cu. m. 5/11

Central Flats.

A. Beadle and partner 99 days worked

L	W	SF	SM	H	CF	CH	
18	x 15 1/2	= 279	= 26.92	x 13.5	= 376 1/4	= 106.64	} @ 32¢ per fathom.
25	x 5	= 125	= 11.61	x 10	= 1250	= 35.49	
9	x 11	= 99	= 9.19	x 10	= 990	= 28.03	
					<u>6007</u>	<u>170.16</u>	

Charge to mill - 392 tons

Total money £ 66-13-11  
 less cost £ 10-13-0  
£ 56-0-11

Cost per cu. m. 6/4

C. Parmer and partners      54 days worked

L	W	SF	SH	W	SF	CH
12	x 18	= 216	= 20.06	x 7.5	= 1620	= 45.84
26	x 5.5	= 143	= 13.28	x 7.5	= 1072	= 30.36
					<u>2692</u>	<u>76.23</u>

} @ 30¢ per fathom.

Tonnage to mill = 142 tons

Total money £ 28-0-0  
 Less Cost. £ 7-0-6  
£ 20-19-6

Cost per cu. m. 5/6

Jackson and partners 74 days worked.

	W	SF	SH	H	CF	CH	
x 31 =	372	34.56	x 9.5 =	3534	100.04		} @ 30¢ per ft. ton
Tonnage to mill = 214 tons							
May 4	36-15-0						
	10-13-0						
	26-2-0						

Cost per cu. cu. 5/3



# Central Flatts (Continued).

## A. Lowe and partners

74 days worked

L	W	CF	SH	H	CF	CH	
10.5	x 20	= 210	= 19.51	x 9	= 1890	= 53.51	} @ 30¢ per fathom.
28	x 7.5	= 210	= 19.51	x 4	= 840	= 23.78	
					<u>2730</u>	<u>77.29</u>	

Ounage to mill - 281 tons

Total money £ 28-10-0

Less costs: £ 3-17-3

£ 24-12-9

Cost per cu. m. 6/4

## S. Milham and partners

63 days worked

L	W	CF	SH	H	CF	CH	
13	x 19	= 247	= 22.96	x 8.5	= 2100	= 57.45	} @ 30¢ per fathom.
3	x 12	= 36	= 3.34	x 8	= 288	= 8.15	
					<u>2388</u>	<u>65.60</u>	

Ounage to mill - 164 tons.

Total money £ 25-0-0

Less costs: £ 3-0-3

£ 21-19-9

Cost per cu. m. 1/6

### Rodderup Fell Mine & Mill

Mine. January results was an improvement over December both in the quantity mined 2520 tons compared with 1932 tons in Dec. was 388 tons more & the recovery 6.33% compared with 5.78% in Dec. was 0.55% better. The weather during January was such that we were able to work full time. The improved grade is mainly due to the improved grade of the ore mined. At the end of January there was a slight falling off in the value of the ore in some of the East End Flats & this may slightly lower the grade in the early part of February. I have previously stated in the monthly reports that the grade may rise & fall from month to month & even from week to week. On the whole, the mine position is unchanged.

The unwatering of the Western section of the mine was commenced seriously during the latter part Dec January & good progress made. It is not possible to state when the area will be unwatered but if nothing unforeseen occurs the mine should be unwatered by the end of March.

Re. the Tons per cubic metre. During January, the ore broken in Dec. left in the mine was drawn consequently the tons per cubic metre will be more in January than in December. Really although the difference on paper may be about 0.33 metres the actual results would show little variation if Dec. & Jan. results were based upon the ore broken.

Mill. The results from the Mill show no appreciable change.

A.T.



# Report on the Nenthead Mines February 1938

## Report on the Nenthead Mines February 1938

	<u>Newshurg</u>	<u>Rampgill</u>	<u>Rodderup</u>	<u>Totals</u>
Ore mined	1297 Tons	ore, steam dig'g	2289 Tons	3586 Tons
Ore milled	1297 "	" 7 hours daily.	2348 "	3645 "
Concentrations:	89 "	ore feed oil	196.3 "	225.3 "
% of Galena	6.86 %	engine ran 12	5.8 %	6.86 %
Concentr. Blende	15.00 "	hours daily.	—	15 Tons
% of Blende	1.15 %		—	1.15 %
Hours worked	194 hours		571 hours	765 hours
Tons per hour	3.92 Tons		6.33 Tons	3.92 Tons

## Stocks

	<u>Newshurg</u>	<u>Rampgill</u>	<u>Rodderup</u>	<u>Wellhops</u>	<u>Totals</u>
Crude ore	oil	oil	170	2200	2470 Tons
Blende Withende	1125	250	150	oil	1525 "

	<u>rough blende</u>	<u>fine blende</u>	
Galena at Newshurg	18.9	tons.	Butters ore at Newshurg 574.82
do at Rodderup	32.15	"	do " " Rodderup 87.838 "

Coal consumed at Rampgill	244 Tons
fuel oil "	do 6.5 "
do "	Newshurg 3.75 "
do "	Rodderup 2.00 "

Compressed air produced at Newshurg + Wellhops 1100 cu. ft. per min. Pressure at the face 80 lbs.

Compressed air produced at Rodderup 1200 cu. ft. per min. Pressure at the face 80 to 85 lbs.

Value of Stock per Share 15.

Per Share, -

Sheet No. 10, 188.

February 1938.

Name of Share	Balance Values		Previous Month's Balance		Previous Month's Balance		Previous Month's Balance		Previous Month's Balance		Previous Month's Balance		Previous Month's Balance	
	Per ft	Value	Per ft	Value	Per ft	Value	Per ft	Value	Per ft	Value	Per ft	Value	Per ft	Value
Expend Share	3696	200	28000	1070	24000	1070								
Car 1/3 of Share	1400	78	81800	4048	80258	4470								
Money Share	2448	136												
Share Share	6864	364	8811	206										
1st Share Share			914212	50234	904212	50234								
2nd Share Share	2700	150	74770	4004	74770	4004								
3rd Share Share			41940	2330	41940	2330								
4th Share Share	864	48	888202	21292	888202	21292								
5th Share Share	17642	981	84339	1805736	83652	1804189								
6th Share Share	2652	148												
7th Share Share	20324	1129												

Expend Share: - 40

Share by Development: - 181

Name of Share	Balance Values		Previous Month's Balance		Previous Month's Balance		Previous Month's Balance		Previous Month's Balance		Previous Month's Balance		Previous Month's Balance	
	Per ft	Value	Per ft	Value	Per ft	Value	Per ft	Value	Per ft	Value	Per ft	Value	Per ft	Value
Expend Share	24633	1370	5											
Car 1/3 of Share	80438	4470	5											
Money Share														
Share Share														
1st Share Share	904212	50234	5											
2nd Share Share	72070	4004	6											
3rd Share Share	41940	2330	6											
4th Share Share	888202	21292	5											
5th Share Share	84339	1805736	5											

Montgomery Mine

February 1935

Development footage - 70 feet - 21.33 metres.

Calculated inches of galena - 1.9 ins

Boundary Rise development in the low flat leads.

G. Lindquist and partner 54 days worked

L H SF SH W CF CH } @ day wages.  
70 x 7 = 490 = 45.52 x 5 = 227.50 = 69.37

Charge to mill - nil

Wages paid £ 28 7 0 cost per cu. m. 8/2

L. Yen East portion south of S2. in top flat 1.5 galena as it is.

G. Short and partner 54 days worked

L H SF SH W CF CH } @ day wages.  
Heading 50 x 9 = 450 = 41.80 x 6 = 250.80 = 76.45

Charge to mill - 161 tons

Wages paid £ 21 12 0 cost per cu. m. 5/8

L. Yen West portion south of S2. top flat 2" galena disseminated.

J. Moffatt and partner 59 days worked

L H SF SH W CF CH } @ day wages.  
Heading 20 x 22 = 440 = 40.88 x 6 = 245.28 = 74.75

Charge to mill - 166 tons

Wages paid £ 23 12 0 cost per cu. m. 6/4

L. Yen strip from S.R. in top flat 1.5 galena disseminated.

A. Schering and partner 33 days worked

L H SF SH W CF CH } @ day wages.  
Heading 34 x 6 = 204 = 18.95 x 6 = 113.70 = 34.66  
Dead 30 x 5 = 150 = 13.93 x 2 = 27.86 = 8.49  
1524 = 43.15

Charge to mill - 83 tons

Wages paid £ 13 4 0 cost per cu. m. 6/2

S2 Yen West of L. Yen in top flat 1.5 galena disseminated.

J. Richardson and partner 18 days worked

L H SF SH W CF CH } @ day wages.  
18 x 7 = 126 = 11.70 x 6 = 70.20 = 21.40

Charge to mill - 51 tons

Wages paid £ 7 4 0 cost per cu. m. 6/9



S2 Vein East of L. Vein in the black bed 1.5' galena disseminated.  
A. Armstrong and partner 53 days worked

	L	H	SF	SH	W	CF	CH
Heading	36	9	324	30.10	6	1944	55.04
							} @ days wages
Tonnage to mill - 119 tons							
Wages paid £ 21-4-0							Cost per cu. m. 7/8

D. Vein Sth of S2 Vein in the top flint 2' galena as 2 in.  
D. Liverick and partner 54 days worked

	L	H	SF	SH	W	CF	CH
Drive	35	8	280	26.01	6	1680	47.56
							} @ days wages
Tonnage to the mill - 117 tons							
Wages paid £ 21-12-0							Cost per cu. m. 7/6

D. Vein between H.R. & S1. in middle flint 2' galena disseminated.  
J. Audspeth and partner 54 days worked

	L	H	SF	SH	W	CF	CH
Heading	48	7	336	31.21	6	2016	57.08
							} @ days wages
Tonnage to mill - 140 tons							
Wages paid £ 21-12-0							Cost per cu. m. 7/4

Cot Vein X. string in the middle flint 2.5' galena as 2 in.  
M. Short and partner 51 days worked

	L	H	SF	SH	W	CF	CH
40 x 7	280	26.01	5	1400	39.64		
							} @ days wages
Tonnage to mill - 106 tons							
Wages paid £ 20-8-0							Cost per cu. m. 10/4

Sy Vein X cut to string west in middle flint dead  
H. Kestly and partner 53 days worked

	L	H	SF	SH	W	CF	CH
Wine	14	7	98	9.10	5	490	13.88
Rise	12	6	72	6.69	6	432	12.24
Side	17	4	68	6.32	3	204	5.74
						1126	31.89
							} @ days wages
Tonnage to mill - nil							
Wages paid £ 21-4-0							Cost per cu. m. 13/3

Sy Vein string south of T Vein in Top flint 2.5' galena as 2 in.  
C. Stout and partner 54 days worked

	L	H	SF	SH	W	CF	CH
Heading	28	12	336	31.21	6	2016	57.09
	12	6	72	6.69	6	432	12.24
						2448	69.33
							} @ days wages
Tonnage to mill - 114 tons							
Wages paid £ 21-12-0							Cost per cu. m. 6/3

T. Vein slope in bottom of limestone 2" galena in 1 wt.  
L. Liverick and partner 27 days worked

18 x 8 = 144 = 13.38 x 6 = 864 = 24.46 } @ day wages

Tonnage to mill = 66 tons

Wages paid £ 10-16-0

Cost per cu. in. 8/10

Admiralty Concessions in the top flate blende  
Ephraim Graham and partner 80 3/4 days worked

	L	H	SF	SH	W	CF	CH							
Heading	20	x	6	=	120	-	11.15	x	14	=	1680	-	47.56	} @ day wages.
Drive	18	x	9	=	162	-	15.05	x	6	=	972	-	27.52	
											2652	-	75.08	

Tonnage to mill = 174 tons

Wages paid £ 22-17-10.

Cost per cu. in. 6/10



## General Remarks re mine & Mill

Nentsbury Mine. The output for February was 1297 tons compared with 1228 tons in January. Concentrates recovered amounted to 89 Tons compared with 77.75 Tons. The percentage of recovery was 6.86% compared with 6.33%. The quantity of Blende concentrates recovered was 15 Tons compared with 13 Tons. The percentages were 1.15% & 1.06%.

The improvement in grade which seems as if it may last for some weeks is due to our discovering 1<sup>st</sup> a branch or string of what seems to be a part of "T" vein South of "T" main vein and going from "C" vein to Sincay Vein. This string yields ore of about 10% galena. At this point, there is another string running parallel to "C" vein between High Raise & "T" which yields payable ore. 2<sup>nd</sup> We are also driving on a string parallel to "D" Vein South of S2 which also yields ore of about 10% galena. These two places have yielded ore & seem likely to for some weeks or perhaps months to improve the general value of the ore to between 7 & 8%.

Development. The forebreast from the Rise near the boundary has been driven E 70' = 21.33 metres. We expect to cut a branch bearing N & S & yielding galena in about 100' from where the forebreast was on Feb<sup>ry</sup> 26<sup>th</sup>. We should prove this piece of ground by the end of April at the latest. Should the String when cut yield payable ore we will drive S to prove if S 1 Vein has continued to this point.

Headings. The headings generally have not changed.

Mill. The Crossley Engine bought in 1933 second hand is due for a new piston & lines & side bearings. As a matter of fact, the ~~Insurance~~ Co<sup>y</sup> called our attention to this a year ago. We have purchased new ones which will be fitted as soon as possible. The Mill generally is in good condition.

Potters Ore. Orders for Potters ore amount to the usual monthly quantities to Belgium & Messrs. Morris Ashby & Co<sup>y</sup>.

Witherite. None Produced

Gravel Sales. The outlook for the sale of gravel is encouraging. We have reason to expect increased orders about April or May when road making commences.

# Rodderup Tilt Mine

February 1938

Development footage - mil.

Central flatb cart No 1 going west  
Thos Baskby and partners

77 days worked

L	W	SF	SH	H	CF	CH
14.5	x 19	= 332.5	= 30.89	x 15	= 4988	= 141.21
24	x 4	= 96	= 8.92	x 6	= 576	= 16.31
					5564	157.52

@ 35/- per foot

Tonnage to mill - 270 tons

Total money £ 67-13-4  
Less costs £ 9-11-0  
£ 58-2-4

Cost per cu. m. 1/4

Central flatb cart No 2 going west  
S. Barwick and partners

4 1/2 days worked

L	W	SF	SH	H	CF	CH
14	x 26	= 364	= 33.81	x 12	= 4368	= 123.64

@ 3/- per foot

Tonnage to mill - 230 tons

Total money £ 47-0-4  
Less costs £ 11-5-3  
£ 35-15-1

Cost per cu. m. 5/9

East flatb No 2. going east  
Alkinson and partners

68 days worked

L	W	SF	SH	H	CF	CH
14.5	x 26	= 455	= 42.24	x 11	= 5005	= 141.71

@ 33/- per foot

Tonnage to mill 243

Total money £ 54-9-6  
Less costs £ 9-12-0  
£ 44-17-6

Cost per cu. m. 6/9

Central flatb cart No 3 going west  
W Watson and partners

7 1/4 days worked

L	W	SF	SH	H	CF	CH
18	x 26	= 468	= 43.48	x 11.5	= 5382	= 152.38

@ 34/- per foot

Tonnage to mill 272

Total money £ 64-8-0  
Less costs £ 11-10-9  
£ 52-17-3

Cost per cu. m. 6/11

Central flats east going north

C. Hind and partner

74 days worked

	L	W	SF	SH	H	CF	CH	
Slope	14.5	x 28	= 490	43.48	x 9	= 4410	124.86	} @ 30¢ per fathom
Drive	14	x 5	= 70	6.50	x 4	= 490	13.84	
						4900	138.73	

Tonnage to mill - 217 tons

Total money £ 56-2-0

Less costs £ 14-7-9

£ 42-14-3 + £1 Bonus for drive Cost per cu. m: 6½

Central flats No 1 going east

C. Pannley and partner

75 days worked

	L	W	SF	SH	H	CF	CH	
Roof	14	x 21	= 294	27.31	x 14	= 4116	116.54	} @ 33½¢ per fathom
	22	x 21	= 462	42.92	x 2	= 924	26.16	
						5040	142.70	

Tonnage to mill - 178 tons

Total money £ 58-12-6

Less costs £ 8-11-0

£ 50-1-6

Cost per cu. m: 7

Central flats No 2 going north

J. Mills and partner

78 days worked

	L	W	SF	SH	H	CF	CH	
Total	20.5	x 26	= 533	49.51	x 8	= 4264	120.73	} @ 30¢ per fathom
Less	3	x 12	= 36	3.34	x 8	= 288	8.15	
						3976	112.58	

Tonnage to mill 168 tons

Total money £ 41-10-0

Less costs £ 12-5-9

£ 29-4-3

Cost per cu. m: 5½

Central flats No 2 going west

J. Dalphin and partner

72 days worked

	L	W	SF	SH	H	CF	CH	
Total	22	x 35	= 770	71.83	x 9.5	= 7315	207.13	} @ 30¢ per fathom
Less	12	x 31	= 372	34.56	x 9.5	= 3534	100.06	
						3781	107.07	

Tonnage to mill 174 tons

Total money £ 39-10-0

Less costs £ 8-6-0

£ 31-4-0

Cost per cu. m: 5½

## Rodderup Fell Mine & Mill

Mine. Compared with January the output of crude ore was 2289 tons or 31 Tons less. The output of concentrates was 136.3 Tons compared with 145.65 Tons in January. The percentage recovery was 5.8% compared with 6.33% in January. The output of ore in February was affected by the changing of a winch at the East End Shaft. We removed a winch from this shaft which was only capable of hoisting one cage speedily, prepared new foundations & erected the winch used to sink Wellhope shaft. This winch is capable of hoisting double the quantity of the ore removed. Although we worked night & day it took several days to make the change & in the meantime part of the ore broken in the East End accumulated. The grade of the ore mined fell off somewhat during the month.

The unwatering of the Western Area is progressing steadily but slowly. The first thing to be done as soon as the water is low enough is to get down to the South Flats in the Central Area & drive the 30' about of inclined level to make a communication for the ore to be raised from the Flats to the Horse Level. This work should be completed in a month after drawing commences. When this level is completed a new big area will be available for mining. When this work is completed we shall give our attention to the Flats west of the big X course. We can only do a certain amount of work at a time owing to the scarcity of miners. At present in spite of increased pay on contract at Rodderup no men are applying for work.

The general outlook is unchanged.

Mill. In good condition.

A.T.

3.

Central Flats

A. Beadle and partner

106 days worked

	L	W	SF	SH	H	CF	CH
Flatt.	16 x 16		256	23.78 x 11		2816	74.73
Flatt.	18 x 9		162	18.05 x 11		1982	50.46
Roof	14 x 18.5		314.5	29.21 x 3		944	26.71
Roof	8 x 16		128	11.89 x 10		1280	36.24
						6822	173.14

@ 35¢ per  
fathom.

Tonnage to mill 3114 tons

Total money £ 82-16-8

Less cost £ 13-12-6

£ 69-4-2

Cost per cu. m. 7/2

---

Central Flats No 4 going north

A. Lowe and partner

70 days worked

	L	W	SF	SH	H	CF	CH
10.5 x 24.5			288.75	26.82 x 9		2599	73.57
12 x 20			240	22.30 x 7.5		1800	50.96
						4399	124.53

@ 31¢ per  
cu. m.

Tonnage to mill 195 tons

Total money £ 47-5-6

Less cost £ 5-10-0

£ 41-10-6

Cost per cu. m. 6/8.



# Report on the Nenthead Mines March 1938

## Report on the Nenthead Mines

March 1938

	<u>Nentbury</u>	<u>Rampgill</u>	<u>Rodderup</u>	<u>Totals</u>
Ore mined	1161 Tons	One steam	2281 Tons	3442 Tons
Ore milled	1161 "	main run of	2196 "	3357 "
Galena contents:	93.75%	hours daily, 7	128.4 "	N 217.15%
% of Galena	2.07%	one fuel oil	5.41%	8.07 5.41%
Blende contents:	9.70 Tons	main run	—	9.70 Tons
% of Blende	0.85%	12 hours daily.	—	N 0.85%
Hours worked	295 hours		342 hours	295 342 hours
Tons per hour	3.94 Tons.		6.42 Tons	3.94 6.42 Tons

## Stocks

	<u>Nentbury</u>	<u>Rampgill</u>	<u>Rodderup</u>	<u>Wellhope</u>	<u>Totals</u>
Crude oil	nil	nil	255	2200	2455 Tons
Waste-Winterite	1125	250	150	nil	1525

rough blende 20.8 Tons  
 fine do 22.057 "  
 Galena at Nentbury 22.45 Tons. Patterns one 37.57 Tons.  
 Do at Rodderup 31.30 " Do 62.530 "

Coal consumed at Rampgill 22 Tons  
 Fuel oil " " 5 "  
 Do " " Nentbury 3 "  
 Do " " Rodderup 1 "

Compressed air produced at Nenthead & Wellhope  
 100 cu.ft. per min. Pressure at the face 80 lbs.

Compressed air produced at Rodderup 1200 cu.ft.  
 per min. Pressure at the face 80 to 85 lbs.

A.T.



Cabin Sheet for the 13

On Rains

Shelter

March 1908

On Rains				Shelter				Without Value			
Production from Previous Months & B.				Grand 1908				Previous Months & B.			
Name of Unit	Bu. ft	Chas.	Previous Months & B.	Bu. ft	Chas.	Previous Months & B.	Bu. ft	Chas.	Previous Months & B.	Bu. ft	Chas.
1st Unit	4671	259	24103	1070	19962	1111					
2nd Unit	1225	65	80408	4470	79233	4402					
3rd Unit	4124	229									
4th Unit	2837	366									
5th Unit			904212	50234	960212	50234	904212	50234	960212	50234	904212
6th Unit	2160	120	72073	4004	89916	3354	72073	4004	89916	3354	72073
7th Unit			41940	2330	61940	2330	41940	2330	61940	2330	41940
8th Unit	768	43	332895	21244	331630	21244	331630	21244	331630	21244	331630
9th Unit	19536	1085	1000730	53162	496912	53162	1000730	53162	496912	53162	1000730
10th Unit	1519	84									
Annually	21033	1169									

On Rains - 64 ft  
On Shelter - 1 ft



# Herkberg Mine

March 1938

Development footage - 65 feet - 19.81 meters.

Calculated inches of galena - 1.63 ins.

Boundary Rise development rise in the low flatt dead  
G. Haddock and partner 48 days worked

L	H	SF	SH	W	CF	CH
65	x 7	= 455	- 42.24	x 5	= 22.75	= 64.41

} @ days wages

Wages paid £ 24-0-0      Tonnage to the mill - 112      Cost per cu. in. 7/5

L. Vein East portion South of S<sub>2</sub> in the top flatt 1.5" galena disseminated.  
G. Shal and partner 42 days worked

L	H	SF	SH	W	CF	CH
Drive	26	x 7	= 182	- 16.91	x 5	= 910 - 25.76
Heaving	10	x 9	= 90	- 8.36	x 6	= 540 - 15.29
						<u>1450 - 41.05</u>

} @ days wages

Wages paid £ 16-16-0      Tonnage to the mill - 88 tons      Cost per cu. in. 8/2

L. Vein West portion South of S<sub>2</sub> in the top flatt 2" galena disseminated.  
G. Moffatt and partner 56 days worked

L	H	SF	SH	W	CF	CH
Heaving	13	x 22	= 286	- 26.57	x 6	= 1716 - 48.57
Drive	23	x 7	= 161	- 14.96	x 5	= 805 - 22.79
						<u>2521 - 71.38</u>

} @ days wages

Wages paid £ 21-14-6      Tonnage to the mill - 93 tons      Cost per cu. in. 6/1

L. Vein north of S<sub>2</sub> Vein on a string in the middle flatt 1" galena as three ribs  
Oliver Richardson and partner 28 days worked

L	H	SF	SH	W	CF	CH
Drive	17	x 8	= 136	- 12.63	x 6	= 816 - 23.10

} @ days wages

Wages paid £ 11-11-0      Tonnage to the mill - 47 tons      Cost per cu. in. 9/9

S<sub>2</sub> Vein East of L. Vein in the top flatt 1.5" galena disseminated  
A. Armstrong and partner 39 1/4 days worked

L	H	SF	SH	W	CF	CH
Heaving	40	x 9	= 360	- 33.44	x 6	= 2160 - 61.16

} @ days wages

Wages paid £ 15-14-0      Tonnage to the mill - 126 tons      Cost per cu. in. 5/2

D'Vein string South of S<sub>2</sub> in the low flat 1' galena as one rib  
L. Linnick and partner 47 days worked

	L	H	SF	SH	W	CF	CH		
Drive	31	x	7	=	25.92	x	5	=	1395 - 39.50

Wages paid £ 18-16-0 } 6 days wages  
 Tonnage to the mill = 72 tons  
 Cost per cu. m. 9/6

D'Vein between St. Raine and S<sub>2</sub> in the middle flat 2' galena disseminated  
J. Snodgrass and partner 116 days worked

	L	H	SF	SH	W	CF	CH		
Heading	42	x	13	=	546	=	50.72	x	6
									3276 - 42.76

Wages paid £ 18-8-0 } @ day wages  
 Tonnage to the mill = 204 tons  
 Cost per cu. m. 3/9

Cox Vein string going north in the middle flat 2.5' galena as 3 ribs  
M. Short and partner 118 days worked

	L	H	SF	SH	W	CF	CH		
Drive	35	x	7	=	245	=	22.76	x	5
									1225 - 34.68

Wages paid £ 19-2-6 } @ day wages  
 Tonnage to the mill = 82 tons  
 Cost per cu. m. 4/

Sy Vein Drive north in the middle flat 1' galena disseminated  
H. Kelly and partner 117 days worked

	L	H	SF	SH	W	CF	CH		
Drive	18	x	15	=	270	=	25.08	x	6
									1620 - 45.87
Rise	12	x	6	=	72	=	6.69	x	6
									432 - 12.23
									<u>2052 - 58.10</u>

Wages paid £ 18-16-0 } Tonnage to the mill = 75 tons  
 Cost per cu. m. 6/6

Sy Vein string south of T. Vein in the top flat 2' galena as 2 ribs  
C. Stout and partner 46 days worked

	L	H	SF	SH	W	CF	CH		
13 x 13	169	=	15.70	x	8	=	1352	=	38.28
Slope 20 x 6	120	=	11.15	x	6	=	720	=	20.38
									<u>2072 - 58.66</u>

Wages paid £ 18-8-0 } Tonnage to the mill = 126 tons  
 Cost per cu. m. 6/3

T. Vein slope between K and D'Vein lift 2.5' galena as one rib  
L. Linnick 21 days worked

	L	H	SF	SH	W	CF	CH		
16 x 8	128	=	11.89	x	6	=	768	=	21.75

Wages paid £ 8-5-6 } @ day wages  
 Tonnage to the mill = 58 tons  
 Cost per cu. m. 4/4

String parallel to R. Van between A.R. & S. in the top flat 15 galena on 2 vts.

H. Johnston and partner

42 days worked

	L	H	SF	SH	W	CF	CH	
Heading	30	10	300	27.87	6	1800	50.94	} @ days wages.

Tonage to mill = 85 tons

Wagon paid £ 16-16-0

Cost per cu. m. 6/4

Admiralty; Concession in the top flat Blende and very little galena

Ephraim Jackson and partner

50 days worked

	L	H	SF	SH	W	CF	CH	
Slab	15	8	120	11.15	6	720	20.38	} @ days wages
Heading	9	7	133	12.35	6	798	22.59	
						1518	42.97	

Tonage to mill = 115 tons

Wagon paid £ 12-2-6

Cost per cu. m. 5/8

## **General Remarks re Mine & Mill**

Nentsbury Mine. The month of March consisted of 24 days compared with 27 days worked during February. The output of crude ore was 1161 Tons compared with 1297 Tons. Concentrates of Galena produced in March was 93.75 Tons compared with 89 Tons for February. The percentage recovered was galena 8.07% compared with 6.86% & Blende 0.85% compared with 1.15%. The improvement in the grade of ore mined was as predicted in the February report maintained. The improved grade of the ore mined was owing to the yield of the ore raised from the branches off "T" "C" & "D" veins referred to in February report. It seems likely that the yield of from 7 to 8% will be maintained for some weeks, possibly longer.

Development. The forebreast from the Rise near the boundary was driven 65' = 18.88 metres. The N & S string towards which we are driving should be cut about the end of April. Should the string or Vein be payable when cut the future of the mine in this area will be determined & our future policy will depend on the value of the ore in the string.

Headings. Apart from the 3 points referred to above which yield ore up to 10% the value of the ore mined elsewhere is not above 5 to 6%.

Mill. The Crossley Engine has been repaired partly & we have some more repairs to do. The cost is over £100. This cost should be averaged over many months or when considering monthly costs excluded for comparative purposes. The Mill generally is in good condition.

Potters Ore. Orders from Belgium have on the whole been good.

Witherite. None produced

Gravel Sales. These are improving.

General remarks. Owing to the low price of Lead & the low grade of the ore mined we have not incurred more cost than was barely necessary to maintain the Mill with ore & keep one development point going. Should payable ore be discovered of only 7 to 8% we should get an increased output of 125 Tons of crude ore monthly & 10 Tons of concentrates more which \_\_\_\_\_  
\_\_\_\_\_ reduce the loss.

A.T.

# Redrup Fell

March 1938

Development footage - nil.

## Central Flatts East

Nº 1 flath work

Bushby and partners

72 days worked

$$\begin{array}{cccccc} L & W & SF & SH & H & CF & CH \\ 18 \times 21 = 378 & - & 35.12 \times 15 = 527.0 & - & 160.54 \end{array} \left. \vphantom{\begin{array}{cccccc} L & W & SF & SH & H & CF & CH \end{array}} \right\} @ 33\frac{1}{2} \text{ per fathom.}$$

Tonnage to mill - 244 tons

Total money £ 65-17-8

Less costs £ 10-11-3

£ 55-6-5

Cost per cu. m. 6/11

Nº 2 flath work

Barwick and partners

49 days worked

$$\begin{array}{cccccc} L & W & SF & SH & H & CF & CH \\ 14.5 \times 14 = 203 & - & 18.86 \times 12 = 226.32 & - & 68.94 \end{array} \left. \vphantom{\begin{array}{cccccc} L & W & SF & SH & H & CF & CH \end{array}} \right\} @ \text{ days wages.}$$

Tonnage to mill - 148 tons

Wages paid £ 21-7-6

Cost per cu. m. 6/2

Nº 3 flath work

Watson and partners

70 days worked on contract and 3 3/4 days wages

$$\begin{array}{cccccc} L & W & SF & SH & H & CF & CH \\ 20 \times 23 = 460 & - & 42.73 \times 11.5 = 491.36 & - & 149.78 \end{array} \left. \vphantom{\begin{array}{cccccc} L & W & SF & SH & H & CF & CH \end{array}} \right\} @ 33\frac{1}{2} \text{ per fathom.}$$

Tonnage to mill - 245 tons

Total money £ 61-8-11

Less costs £ 13-0-0

£ 48-8-11 + £ 1-8-0 = £ 49-16-11

Cost per cu. m. 6/8

## East Flatts

Flath Nº 2 East

Atkinson and partners

71 days worked

$$\begin{array}{cccccc} L & W & SF & SH & H & CF & CH \\ 18 \times 23 = 414 & - & 38.46 \times 13 = 500.0 & - & 162.38 \end{array} \left. \vphantom{\begin{array}{cccccc} L & W & SF & SH & H & CF & CH \end{array}} \right\} @ 33\frac{1}{2} \text{ per fathom}$$

Tonnage to mill - 251 tons

Total money £ 62-10-8

Less costs £ 8-14-0

£ 53-16-8

Cost per cu. m. 7/1

## East Flats. etc.

Flat N° 3 East.

Harley and partners

64 days worked

$$\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 28 \times 26 = 598 - 55.55 \times 11 = 6578 - 186.25 \end{array} \left. \vphantom{\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 28 \times 26 = 598 - 55.55 \times 11 = 6578 - 186.25 \end{array}} \right\} @ 33\frac{1}{2} \text{ per fathom.}$$

Tonnage to the mill = 320 tons

Total money £ 7-9-10

Less cont. £ 13-6-6  
£ 62-13-11

Cost per cu. m. 6/9

## Central Flats.

N° 1 Flat East

Barrow and partners

72 days worked

$$\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 14 \times 22 = 308 - 28.61 \times 13 = 4004 = 113.37 \end{array} \left. \vphantom{\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 14 \times 22 = 308 - 28.61 \times 13 = 4004 = 113.37 \end{array}} \right\} @ 30\frac{1}{2} \text{ per fathom.}$$

Tonnage to mill = 148 tons

Total money £ 11-15-0

Less cont. £ 9-4-0  
£ 32-11-0

Cost per cu. m. 5/9

Flat N° 2 North.

Wright and partners

72½ days worked

$$\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 12 \times 32 = 384 - 35.67 \times 8 = 3072 = 86.98 \end{array} \left. \vphantom{\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 12 \times 32 = 384 - 35.67 \times 8 = 3072 = 86.98 \end{array}} \right\} @ \text{ deep wages}$$

Tonnage to the mill = 155 tons

Wages paid £ 24-3-9

Cost per cu. m. 6/3

Flat N° 2 North.

Dakin and partners

75 days worked and 2 days wages

$$\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 8.5 \times 22 = 187 - 17.37 \times 9.5 = 1746 = 50.30 \\ 6 \times 14 = 84 - 7.80 \times 9.5 = 790 = 22.59 \\ 1.5 \times 34 = 51 - 4.74 \times 9.5 = 484 = 13.71 \\ 10.5 \times 5 = 50 - 4.64 \times 9.5 = 475 = 13.45 \\ 5 \times 25 = 125 - 11.61 \times 9.5 = 1188 = 33.62 \end{array} \left. \vphantom{\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 8.5 \times 22 = 187 - 17.37 \times 9.5 = 1746 = 50.30 \\ 6 \times 14 = 84 - 7.80 \times 9.5 = 790 = 22.59 \\ 1.5 \times 34 = 51 - 4.74 \times 9.5 = 484 = 13.71 \\ 10.5 \times 5 = 50 - 4.64 \times 9.5 = 475 = 13.45 \\ 5 \times 25 = 125 - 11.61 \times 9.5 = 1188 = 33.62 \end{array}} \right\} @ 32\frac{1}{2} \text{ per fathom.}$$

1188 33.62

Tonnage to mill = 211 tons

Total money £ 52-10-8

Less cont. £ 9-11-9  
£ 42-18-11

2 days @ 1/6 15-0  
£ 43-13-11

Cost per cu. m. 6/6



3

Central Flats etc.

Grant and partners

69 days worked

L	N	SF	SH	H	CF	CH	
22	x 14	= 308	= 34.74	x 11	= 411.4	= 116.49	} @ 32 1/2 per fathom
15	x 15	= 225	= 20.90	x 3	= 62.7	= 19.11	
						<u>478.9</u>	

Boysage to mill = 287 tons

Total money £ 58-17-11  
 Less costs £ 6-16-3  
£ 47-1-8

Cost per cu. cu. 6/11

No 4 flake North  
Low and partners

48 days worked

L	N	SF	SH	H	CF	CH	
11	x 26	= 286	= 26.57	x 8	= 212.56	= 64.78	} @ 30¢ per fathom
16	x 5	= 80	= 7.43	x 5	= 37.15	= 11.33	
						<u>268.8</u>	

Boysage to the mill = 154 tons

Total money £ 28-0-0  
 Less costs £ 5-15-3  
£ 22-4-9

Cost per cu. cu. 5/10

No 5 flake West  
Living and partners

23 days worked and 8 days time

11	x 13	= 143	= 13.29	x 11	= 146.19	= 44.59	} @ 31¢ per fathom
						<u>146.19</u>	

Boysage to mill = 88 tons

Total money £ 16-15-10  
 Less costs £ 2-9-0  
£ 14-6-10  
£ 17-6-0

Cost per cu. cu. 7/9



## **Rodderup Fell Mine & Mill**

Mine. The output of crude ore for March was 2281 Tons compared with 2289 Tons in February. Concentrates produced amounted to 123.4 Tons compared with 136.3 Tons. The percentage recovered was 5.8% in February & 5.41% in March. The falling off in the grade is due to three out of five flats in the East End becoming poor at the same time & remaining poor during the month. The cause of the falling off in the grade is white quartz or Calcite fissures varying in width from 1" to 6" wide running almost parallel in bearing to the Vein. These fissure string either improve the grade or as in some cases cut the lead completely out. An improvement does not generally occur until we approach another fissure or string when as often happens the one throughout the Flats improves without any other indication. The Flats in the Central section are much better & generally more consistent. Yet there have been months when the ore mined in the East End Flats was as rich as the ore mined in the Western Flats. During April, we shall mine more ore from the Western Flats & drive forebreasts in one or two Flats in the East section instead of mining as we have done.

We have unwatered a part of the Western area & work has commenced re: the clearing of the intermediate level. There are many falls of roof & sides & it will take some time to clear the debris before mining can be resumed. The first thing to be done is to drive the inclined drift to connect with the Blackburn Level. The unfortunate position re Rodderup is "We have not got a blocked out area of ore of known value & as a consequence we must just mine the ore whether of good or low grade to supply the Mill. The miners are working hard & more ground per man is cut than ever before but after picking ore a high percentage the grade sent to the mill is too low to meet the cost of mining with lead at £15 per ton. The position has caused us much anxiety & we are watching the situation very carefully. It must be remembered also that the costs of electricity now increased are abnormal as to unwater the mine we have had to keep one compressor working nights and weekends.

Mill. Nothing to report, in good condition.  
A.T.



# Report on the Nenthead Mines April 1938

## Report on the Nenthead Mines

April 1938

	Nentbury	Rampgill	Rodderup	Totals
One mine	1136 Tons	Working & stoppage	1744	
One mine	1136	of which on stream	57 2-2	2580 Tons 2830
Of mine contents:	85 . 83.0	Engine area 12 acres	12 2 1/2 1949	3115
% of Galena	7.3 %	daily 5 one Tons	114.8 114.8	197.2
Blende contents:	1600 Tons	oil machine 12	5.75	1.2 5.75 % 5.75
% of blende	1.29 %	hours daily.		4.07 Tons
Hours worked	292 hours		330 hours	292 330
Tons per hour	3.89 Tons		6.0 Tons	3.89 6.0 Tons

## Stocks

	Nentbury	Rampgill	Rodderup	Wethers	Totals
Brass ore	nil	nil	20	2300	Tons 2320
Blende-litharite	1125	250	150	nil	1525

rough blende  
fine blende  
Galena at Nentbury 10.45 Tons  
Do . Rodderup 17.102 Do . - Rodderup 45.57 Tons.  
Do . - Rodderup 60.130 .

Coal consumed at Rampgill 27 Tons  
Fuel oil " " Do 7 .  
Do " " Nentbury 3 .  
Do " " Rodderup 4 .

Compressed air produced at Nenthead & Wethers  
400 cu. ft. per min. Pressure at the face 80 lbs.

Compressed air produced at Rodderup 1200 cu. ft.  
per min. Pressure at the face 80 to 85 lbs.

25.

Water Used for May 18

On Balance

Chas. No. 123

April 1902

Particulars from Previous Months S. R.	Garden Value		C.R. Remains		Previous Month's C.R.		C.R. Remains		Garden Value		Previous Month's C.R.		C.R. Remains		Garden Value	
	bu. ft.	Yds.	bu. ft.	Yds.	bu. ft.	Yds.	bu. ft.	Yds.	bu. ft.	Yds.	bu. ft.	Yds.	bu. ft.	Yds.	bu. ft.	Yds.
Water of Main																
Expend Main	24 96	139														
On S. R. of S. R.	18 68	94														
Money Main	40 63	220														
Expend Main	69 46	386														
1 <sup>st</sup> Main Main	—	—														
2 <sup>nd</sup> Main Main	35 46	194														
Ways & Water	—	—														
Water Main	523	29														
	191 34	10 65														
	24 00	1 33														
	215 34	11 96														

Monthly

Expenditure Budget: 60 ft. 18.28

C.R. by Development: 22

Name of Main	Garden Value		C.R. Remains		Previous Month's C.R.		C.R. Remains		Garden Value		Previous Month's C.R.		C.R. Remains		Garden Value	
	bu. ft.	Yds.	bu. ft.	Yds.	bu. ft.	Yds.	bu. ft.	Yds.	bu. ft.	Yds.	bu. ft.	Yds.	bu. ft.	Yds.	bu. ft.	Yds.
Expend Main	1 44 86	9 42 8														
On S. R. of S. R.	4 46 68	43 13 8														
Money Main	—	—														
Expend Main	—	—														
1 <sup>st</sup> Main Main	90 42 12	5 02 34 8														
2 <sup>nd</sup> Main Main	6 63 69	36 84 6														
Ways & Water	4 19 46	23 30 6														
Water Main	38 11 02	2 11 42 5														
	148 84 44	8 24 10 346														

# Menkberry Mine

April 1938

Development footage - 60 feet - 18.28 metres.

Calculated width of galena - 1.75 inches.

Development at the boundary in the low flat dead  
C. Madopetk and partner 46 days worked

L	H	SF	SH	W	CF	CH	
Drive	60 x 7	420	39.02	x 5	2100	59.46	} @ day wages
Tonnage to the mill - incl							
Wages paid	£ 21-17-0					Cost per cu. m.	7/4

R. Van east portion south of S2V in low flat 1.5" galena disseminated  
J. Shat and partner 46 days worked

L	H	SF	SH	W	CF	CH	
Drive	26 x 9	234	21.74	x 5	1170	33.13	} @ day wages
Healing	11 x 9	99	9.19	x 6	594	16.82	
						1764	49.95
Tonnage to mill - 73 tons							
Wages paid	£ 18-8-0					Cost per cu. m.	7/4

R. Van west portion south of S2V in top flat 2" galena disseminated.  
J. Skoffatt and partner 69 days worked

L	H	SF	SH	W	CF	CH	
18 x 21	378	35.11	x 7	2646	74.92	} @ day wages	
8 x 7	56	5.20	x 6	336	9.51		
Drive	20 x 10	200	18.58	x 5	1000	28.32	
						3982	112.75
Tonnage to mill - 211 tons							
Wages paid	£ 27-12-0					Cost per cu. m.	4/11

R. Van string between H. Raise & S. Vein in top flat 1.5" galena as 2 ribs  
H. Johnson and partner 46 days worked

L	H	SF	SH	W	CF	CH	
20 x 10	200	18.58	x 6	1200	33.98	} @ day wages	
Tonnage to mill - 52 tons							
Wages paid	£ 18-0-0					Cost per cu. m.	10/4



2. H. H.

S<sub>2</sub> Vein string South of S<sub>2</sub> going East in middle flatt 1.5' galena as 2 ribs.  
W. Liscick and partner 44 days worked

	L	H	SF	SH	W	CF	CH	
Rise	12	6	42	6.69	6	432	12.23	} @ days wages
Drive	19	9	171	15.88	6	1026	29.05	
						1458	41.28	

Donnage to mill - 58 tons  
 Wages paid £ 17-12-0 Cost per cu. m. 8/6

S<sub>2</sub> Vein East of i. Vein in middle flatt 2' galena disseminated  
C. Chuanhong and partner 45 days worked

	L	H	SF	SH	W	CF	CH	
Heading	29	12	348	32.33	6	2088	57.12	} @ days wages

Donnage to the mill - 118 tons  
 Wages paid £ 18-0-0 Cost per cu. m. 6/1

S<sub>2</sub> Vein between H. Raise and S<sub>2</sub> Vein in middle flatt 2' galena as 4 ribs.  
V. E. Hudspeth and partner 44 days worked

	L	H	SF	SH	W	CF	CH	
Heading	32	13	416	38.64	6	2496	70.68	} @ days wages

Donnage to mill - 138 tons  
 Wages paid £ 17-12-0 Cost per cu. m. 5/2

Box Vein string north of H. Raise in middle flatt 2' galena as 4 ribs.  
M. Short and partner 46 days worked

	L	H	SF	SH	W	CF	CH	
	28	7	196	18.21	8	1568	44.39	} @ days wages

Donnage to mill - 86 tons  
 Wages paid £ 18-5-6 Cost per cu. m. 8/2

S<sub>2</sub> Vein string north in the top flatt 1' galena as 2 ribs.  
H. Keith and partner 45 days worked

	L	H	SF	SH	W	CF	CH	
Drive	32	11	352	32.70	6	2112	57.80	} @ days wages

Donnage to mill - 58 tons  
 Wages paid £ 18-0-0 Cost per cu. m. 6/

S<sub>2</sub> Vein string south of i. Vein in the top flatt 2.5' galena disseminated  
C. Stout and partner 46 days worked

	L	H	SF	SH	W	CF	CH	
Heading	13	13	169	15.70	9	1521	43.06	} @ days wages
Side	12	7	84	7.80	5	420	11.89	
						1941	54.95	

Donnage to mill - 128 tons  
 Wages paid £ 18-8-0 Cost per cu. m. 6/8

3.

1. Vein stope in the low flat 1.5" galena on 2 in  
James River 17 days worked

	L	H	SF	SH	W	CF	CH	
Stope	11	8	= 88	= 8.18	× 6	= 528	= 14.95	} 2 days wages
	Luggage to the mill - 19 tons							
Wages paid	L 6 7 6							Cost per cu. ft. 8/6

Admiralty Concession in the top flat Blende + some galena  
E. Graham and partner 69 days worked

	L	H	SF	SH	W	CF	CH	
Heading	22	× 15	= 330	= 30.66	× 6	= 1980	= 56.06	} 2 days wages
Drive	12	× 4	= 84	= 7.80	× 5	= 420	= 11.89	
						2400	67.95	
	Luggage to mill - 195 tons							
Wages paid	L 11 0							Cost per cu. ft. 3/9



## **General remarks re Mine & Mill**

Nentsbury Mine. The number of days worked during April was 23. Easter holidays accounted for 3 days. Tons mined & crushed amounted to 1136 from which was recovered 83 Tons of lead concentrates & 14.7 tons of Blende concentrates. The percentage of recovery was 7.3% Lead & 1.29% Blende. The grade of the ore dropped from 8.07% to 7.3% mainly owing to rock in an upper random where the ore was good being temporarily stopped to drive a forebreast below where the ore was poorer. After this has been driven 100' headings will be taken out & the grade should improve. The position in Nentsbury is generally unchanged.

Development. The forebreast driven from the rise near the boundary E was advanced 60' = 18.28 metres. Towards the End of the month a N & S string was cut. The string a few inches wide was better for several feet in the roof. The mineral content consisted of about ½" of galena on one wall. Consideration was given to rising on this string but having obtained reliable information that another string yielding more ore is about 50' further East we have continued driving & should cut the second string or Vein before the end of May. To keep the monthly expenditure as low as possible this is the only development point where work is progressing.

Headings. Unchanged generally.

Mill. The Crossley Engine has been completely overhauled & is now in first class condition.

Potters Ore. Orders for Potters ore are mainly for Belgium.

Witherite. None Produced.

Gravel Sales. These are improving

General Remarks. Every effort has been & is being made to produce as much as possible from Nentsbury & keep the cost to a minimum. The continuing fall in the price of Lead & Zinc & the comparatively low grade of the ore mined causes all concerned daily anxiety. There is no possibility of meeting costs with ore of 7 to 8% Galena & Lead at £15 per Ton.  
A.T.

# Roadmap Hill Mine

April 1938

Development footage = 265 feet - 8.07 inches

## Central Flatts East

No 3 Flatt going west  
J. Bunch and partners

33 days in the flatt + 34 days driving

	L	H	SF	SH	N	CF	CH	
Flatt	3	21	-	63	-	5.85	x 15	- 945 - 26.75
Drive	4.5	x 7	-	31.5	-	2.92	x 5	- 158 - 4.45
Incline	11	x 7	-	77	-	7.15	x 6	- 462 - 13.08
						1565		44.28

@ days wages

Total money paid £ 40-7-0  
Tonnage to the mill - 84 tons  
Cost per cu. m. 18/3

No 3 Flatt going west  
W. Watson and partners

60 days worked

	L	H	SF	SH	N	CF	CH	
18 x 21.5	-	387	-	35.95	x 11.5	-	4460	- 126.01

Tonnage to mill - 201 tons

Total money £ 47-15-10  
Less costs £ 10-19-4  
£ 36-16-6

Cost per cu. m. 5/10

No 2 Flatt going west

J. Berris and partners

42 days worked

	L	H	SF	SH	N	CF	CH	
17 x 18	-	306	-	28.43	x 12	-	36.72	- 103.97

Tonnage to the mill - 74 tons

Total £ 42-14-3  
Less costs £ 6-3-0  
£ 36-11-3

Cost per cu. m. 7/

No 3 Flatt going East

J. Hind and partners

56 days in flatt + 13 days driving

	L	H	SF	SH	N	CF	CH	
Drive	11	x 7	-	77	-	7.15	x 5	- 385 - 10.90
Flatt	9	x 12	-	108	-	10.03	x 11	- 1188 - 33.64
"	12	x 16	-	192	-		x 11	- 1573 - 44.54
						3146		89.08

@ days wages

Total money £ 41-15-0  
Less costs £ 9-13-8  
£ 32-1-4

Cost per cu. m. 7 1/2

No 2 Flatt going East

J. Atkinson and partners

60 days worked

L	W	SF	SH	H	CF	CH	
13	x 21	= 273	- 25.36	x 13	= 354.9	- 100.49	} 24 1/2 @ 30¢ per fathom
Tonnage to mill = 148 tons							

Total money £ 37 0-0

Less costs £ 8-4-4

£ 28-15-8

Cost per cu. m. 5/9

### General Flats

No 1 Flatt going East

A. Parkley and partners

48 days worked

L	W	SF	SH	H	CF	CH	
21	x 7	= 147	- 13.66	x 12	= 163.92	- 49.95	} @ day wages
Tonnage to the mill = 86 tons							

Wages paid £ 18-3-0

Cost per cu. m. 7/3

No 2 Flatt going west

J. Milburn and partners

44 days worked

L	W	SF	SH	H	CF	CH	
11	x 22	= 242	- 22.48	x 9.5	= 229.9	- 65.09	} @ day wages
Tonnage to mill = 138 tons							

Wages paid £ 16-14-6

Cost per cu. m. 5/2

No 2 Flatt going west

V. Dacker and partners

1 day worked

L	W	SF	SH	H	CF	CH	
12.5	x 21.5	= 268.75	- 24.96	x 9.5	= 255.3	- 72.29	} 17 1/2 @ 30¢ per fathom
Tonnage to the mill = 154 tons							

Total money £ 26-10-0

Less costs £ 5-9-8

£ 21-0-4

Cost per cu. m. 4/10

No 2 Flatt going west

J. Jackson and partners

41 days worked

L	W	SF	SH	H	CF	CH	
11	x 22	= 242	- 22.48	x 9.5	= 229.9	- 65.09	} 16 1/2 @ 30¢ per fathom
Tonnage to the mill = 171 tons							

Total money £ 24-0-0

Less costs £ 5-19-0

£ 18-1-0

Cost per cu. m. 3/4

Heading.

W. Varty and partner

43 days worked

$$\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 43 \times 19 = 817 - 75.90 \times 4 = 3268 - 92.53 \end{array} \left. \begin{array}{l} \\ \\ \end{array} \right\} @ \text{ day wages}$$

Wages paid £ 19-7-0

Tonnage to mill - 116 tons

Cost per cu. m. 4/2

No 4 Flatt going North

A. Lowe and partner

45 days worked

$$\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 8 \times 25 = 200 - 18.58 \times 8 = 1600 - 45.30 \\ 5 \times 6 = 30 - 2.79 \times 5 = 150 - 4.24 \end{array} \left. \begin{array}{l} \\ \\ \end{array} \right\} @ \text{ day wages}$$

Wages paid £ 16-17-6

Tonnage to the mill - 123 tons

Cost per cu. m. 6/10

No 4 Flatt going west

J. Swain and partner

45 days worked

$$\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 3 \times 13 = 39 - 3.62 \times 11 = 429 - 12.15 \\ 14 \times 13 = 182 - 16.91 \times 12 = 2184 - 61.84 \end{array} \left. \begin{array}{l} \\ \\ \end{array} \right\} \begin{array}{l} 18/1 @ 30/ \\ \text{per fathom} \end{array}$$

Total money £ 24-5-0  
 Less costs £ 6-10-8  
£ 20-14-4

Tonnage to the mill - 100 tons

Cost per cu. m. 5/4

No 5 Flatt going North

C. Grant and partner

45 days worked

$$\begin{array}{r} L \quad W \quad SF \quad SH \quad H \quad CF \quad CH \\ 11 \times 20 = 220 - 20.44 \times 14 = 3080 - 87.20 \end{array} \left. \begin{array}{l} \\ \\ \end{array} \right\} \begin{array}{l} 21/2 @ 34/6 \\ \text{per fathom} \end{array}$$

Total money £ 33-12-0  
 Less costs £ 6-11-0  
£ 27-1-0

Tonnage to the mill - 154 tons

Cost per cu. m. 6/2

## **Rodderup Fell Mine & Mill**

Mine. The reduction in the output for April was mainly owing to our having to stop work in the East End Flats, with the exception of one & remove the miners to the West Central Area. It took at least two weeks to make preparations to open up new Flats to give employment to the miners transferred & during that time the tonnage dropped. We are also working a less height & picking out the richest parts of the Flats consequently less tonnage per cubic metre will be sent to the mill. The result should be an improvement in the grade but how far this will offset by a reduction in tonnage remains to be proved. It was a very great disappointment that just had we had winches fixed & running smoothly & everything ready for a big output from the East End area the "Flats" yield should drop to a low value. We are driving a forebreast in the Flats W & parallel with the vein & about 60' N of the Vein. Payable ore may be struck at any time & if so an increased tonnage can be mined. From close observation it seems that periodically small faults running parallel with the Vein cut galena values almost completely out, & other faults running similarly enrich the ore. We have not done sufficient work to have a plan prepared indicating where and which of these faults impoverish or enrich the deposit & whether the impoverishment or enrichment is in the top or bottom of the Flats.

There is no doubt but that diamond drilling would be an admirable method of proving this large Flatted area.

The incline from the Blackburns level to the South Flats in the West Central area should be completed during May. When completed this will be the means of mining ore from the South side which will be sent direct to the level & to the mill.

Electricity Costs. The cost of electrical energy which I referred to as abnormal during March was normal for April. The Units used were some 24000 less. With the grade of ore in sight in Rodderup it is not possible to make the mine pay with lead at £15 per ton.

Mill. The mill is in good condition.  
A.T.

April

38

1136 - 1136 610 37 669 1.86 2.00 1.88 316 46 104 - 419 - 419 2.22 1.18 1.19 1.74 0.93 4/3 9/6 4/10 4/5 8/2 8/1 4/9 13 2206 1.63  
 1228 - 1228 572 108 400 2.08 1.98 2.08 323 99 171 - 493 - 493 2.44 2.31 1.13 1.81 0.88 4/4 10/6 4/10 4/5 8/10 8/4 4/10 13 2276 1.60  
 1205 - 1205 596 96 602 2.02 1.98 2.01 321 36 164 - 494 - 494 2.30 2.28 1.14 1.74 0.91 4/4 9/6 4/10 4/5 8/9 8/5 4/10 13 2333 1.61  
 1744 - 1744 991 28 1019 1.76 2.00 1.76 620 44 41 - 284 449 458 2.31 2.40 1.60 1.53 2.44 1.38 10/1 11/5 10/1 9/2 9/9 6/9 4/1 4/2 13 1502 0.83  
 2243 - 2243 1274 164 1276 1.81 0.64 1.81 412 3 119 - 104 670 334 3.23 3.22 1.48 1.78 2.76 1.53 11/4 4/6 11/4 11/1 11/1 10/9 6/10 4/1 11 1833 0.70  
 2133 - 2133 1203 244 1212 1.80 1.00 1.80 459 11 104 - 105 615 810 3.12 3.09 1.73 1.73 2.68 1.44 11/2 9/6 11/2 10/9 10/9 6/10 4/1 11 1833 0.70

114

56

4080 8/4 1126 4/4  
 620 7/4 1394 4/3  
 660 9/2 1308 4/-  
 669 8/1 1019 4/1

offered  
 3 6/2  
 4 6/4  
 5 6/6



# Report on the Nenthead Mines May 1938

## Report on the Nenthead Mines

May 1938.

	<u>Nentbury</u>	<u>Rampgill</u>	<u>Rodderup</u>	<u>Totals</u>
One mined	1259 Tons	During to an	1857 Tons	3116 Tons
One milled	1259 "	insufficient water	1877 "	3136 "
Galena conc. prod.	94 "	supply one steam	123-9 "	N 21728-
% of Galena	7.46 %	engine ran 12	6.6 %	7.46 6.6 %
Blende conc. prod.	12.25 Tons	hours daily &		12.25 Tons
% of Blende	1.00 %	one fuel oil		N 1.00 %
Hours worked	338	engine 12 hours	320 hours	338 320 hours
Tons per hour	3.72 Tons	daily.	5.86 Tons	3.72 5.86 tons

## Stocks

	<u>Nentbury</u>	<u>Rampgill</u>	<u>Rodderup</u>	<u>Wellhope</u>	<u>Total</u>
Crude ore	nil	nil	nil	2300	2300
Blende witherite	1125	250	150	nil	1525

rough blende 11-182 Tons  
fine blende 11-390 "  
Galena at Nentbury 6.90 Tons Patterns one at Nentbury 38.62 Tons  
Do at Rodderup 15.052 " Do " Rodderup 61.092

Coal consumed at Rampgill 50 Tons  
Fuel oil " " Do \* 1 Ton  
Do " " Nentbury 3.25 "  
Do " " Rodderup 6.00 "  
*Pub! During to an extent for the morning this comparison were taken by the mine. \*The had a supply of fuel oil at the place. Taken hence low engine prior to.*

Compressed air produced at Nenthead & Wellhope  
1100 cu. ft per min. Pressure at the face 80 lbs.

Compressed air produced at Rodderup Well  
1200 cu. ft per min. Pressure at the face 80 to 85 lbs.  
at



[illegible]

Evolutionary Change:-

Order by Express:- Nil.

# Huntsbar, Miss

May 1938

Development footage - 53 feet - 16-15 inches.

Calculated inches of galena - 182 inches

Boundary Rise Development drive in the middle random lead  
C. Hunsbatt and partner 51 1/2 days worked

L	H	SF	SH	N	CF	CH	
53	x 7	= 371	= 34.47 x 5	= 1865	= 52.62		@ days wages

Wagon paid £ 23-5-9      Tonnage to the mill - nil      Cost per cu. in. 8/10

L. Vein East portion South of S2 Y. in the low flat 1.5" galena  
J. Short and partner 51 1/2 days worked

L	H	SF	SH	N	CF	CH	
Drive	26	x 9	= 234	= 21.74 x 5	= 1170	= 33.13	@ days wages
Heading	14	x 10.5	= 147	= 13.65 x 6	= 882	= 24.94	
					2054	58.10	

Wagon paid £ 20-14-0      Tonnage to the mill - 100 tons      Cost per cu. in. 7/12

L. Vein west portion South of S2 Vein in the top flat 3" galena  
J. Moffatt and partner 52 days worked

L	H	SF	SH	N	CF	CH	
Heading	21	x 21	= 441	= 40.94 x 8	= 3528	= 99.89	@ days wages

Wagon paid £ 20-16-0      Tonnage to mill - 205 tons      Cost per cu. in. 4/2

L. Vein string between H. Rise & L. Vein in the top flat 1.5" galena  
H. Johnston and partner 29 days worked

L	H	SF	SH	N	CF	CH	
Steel ground	30	x 22	= 660	= 61.31 x 8	= 5280	= 149.50	@ days wages
Lead					3400	96.27	
					1880	53.23	

Wagon paid £ 11-12-0      Tonnage to the mill - 99 tons      Cost per cu. in. 4/5

2.

S2 Vein string south of S2 V joining west in the middle flat 2' galena  
Wm Richardson 25 days worked

	L	H	SF	SH	W	CF	CH	
Drive	11	12.5	= 137.5	12.78	6	= 825	23.36	} @ day wages

Churnage to the mill - 107 tons

Wages paid £ 10-0-0

Cost per cu. m. 8/4

S2 Vein string South of S2 V. joining East in the middle flat 2' galena  
Wm Liversidge and partner 51 days worked

	L	H	SF	SH	W	CF	CH	
Rise	11	6	= 66	6.13	6	= 396	11.21	} @ day wages
Slope	31	9	= 279	25.92	6	= 1674	41.39	
						2070	58.60	

Churnage to the mill - 125 tons

Wages paid £ 20-8-0

Cost per cu. m. 6/11

S2 Vein East of L Vein in the middle flat 1.5' galena  
A. Armstrong and partner 52 days worked

	L	H	SF	SH	W	CF	CH	
Heading	47	12	= 564	52.40	6	= 3384	95.82	} @ day wages

Churnage to the mill - 159 tons

Wages paid £ 20-16-0

Cost per cu. m. 4/4

D Vein between H. Raise and L Vein in the top flat 2' galena  
J. Huchpelt and partner 51 days worked

	L	H	SF	SH	W	CF	CH	
Heading	6	13	= 78	7.25	6	= 468	13.25	} @ day wages
	22	8	= 176	16.35	6	= 1056	29.90	
						1524	43.15	

Churnage to the mill - 92 tons

Wages paid £ 20-8-0

Cost per cu. m. 9/6

Box Vein string north of H. Raise in the middle flat 2' galena  
M. Shott and partner 49 days worked

	L	H	SF	SH	W	CF	CH	
Drive	35	7	= 245	22.76	5	= 1225	34.69	} @ day wages
Slope	20	4	= 80	7.43	6	= 480	13.59	
						1705	48.28	

Churnage to the mill - 101 tons

Wages paid £ 19-12-0

Cost per cu. m. 8/11

Sy. Vein string on the North in the top flatt 15" galena

H. Keilly and partner 52 days worked

	L	H	SF	SH	W	CF	CH	
Drive	16	18	288	26.74	6	1728	48.93	} @ day wages

Tonnage to the mill - 93 tons  
Wages paid £ 20-16-0 Cost per cu. m. 8/6

Sy. Vein string south of T. Vein in the top flatt 2" galena

G. Stout and partner 52 days worked

	L	H	SF	SH	W	CF	CH	
Heading	11	18	72	6.69	6	432	12.23	} @ day wages
Drive	13	8	104	9.66	6	624	17.67	
						1056	29.90	

Tonnage to the mill - 64 tons  
Wages paid £ 20-16-0 Cost per cu. m. 13/10

T. Vein slope in the low flatt 2" galena

Jama Liewick 25 3/4 days worked

	L	H	SF	SH	W	CF	CH	
14 x 8	112	10.40	6	672	19.03			} @ day wages

Tonnage to the mill - 45 tons  
Wages paid £ 9-13-1 Cost per cu. m. 10/2

Admiralty Concession in the top flatt ~~Band~~ + little galena

E. Graham and partner 76 days worked

Heading	30	4	120	11.15	6	720	20.38	} @ day wages
Slope	20	15	300	27.87	6	1800	50.94	
						2520	71.35	

Tonnage to the mill - 131 tons  
Wages paid £ 21-6-0 Cost per cu. m. 5/11

## **General Remarks re Mine & Mill**

Nentsbury Mine. The number of days worked in May was 26. The tonnage mined & milled was 1259 tons. Lead concentrates produced amounted to 94 Tons. The yield was 7.46%. Blende concentrates produced amounted to 12.28 Tons. The yield was 1.00%. Owing to the drought the supply of water was insufficient to fully supply the mill, consequently the "tons per hour" is below 4 tons. Towards the end of May the water supply increased. The outlook for June id brighter.

Development. The forebreast E from the rise near the boundary has been driven 55' = 16.75 metres. We expected to cut the second string or Vein by the end of May but failed to do so. We shall continue driving during June & should cut the string before the end of the month. In all we have driven E & W between 600' and 700'. We know a Vein or string does exist but in the existing conditions & being without copies of the reports made in 1923 \_\_\_\_\_ we have to guess distances.

Headings. Conditions similar the grade should keep for June to between 7 & 8% galena.

Mill. In good condition.

Potters Ore. If we could sell all the ore produced as Potters ore & get a price in comparison it would help matters considerably & possibly we would also meet costs.

Witherite. None produced.

Gravel Sales. Sales in general are maintained.

General Remarks. With lead at £14 per ton & an ore of about 7.5% galena it is impossible to meet the cost of working Nentsbury. Our costs at about 19/- per ton based on comparatively small tonnage are lower than any metalliferous mine in England. Efforts are continually being made to further reduce the cost per ton.

A.T.

## Roadmap Hill Mine

May 1938

Development footage - 78 feet - 28.74 inches.

Drilling the incline in the Central Flats Some mineral obtained from a pit  
J. Brodby and partner 56 days worked

$$L \quad W \quad SF \quad SH \quad W \quad CF \quad CH \quad \} \\ 26 \times 4 = 182 = 16.91 \times 6 = 1092 = 30.91 \quad \} @ \text{ days wages}$$

Wages paid £ 32-14-0      Yonage to the mill - 30 ton  
 Cost per cu. in: 2 1/2

No 1 Flatt West in the Central Flats East.      Dead.

J. Hind and partner 52 days worked

$$L \quad W \quad SF \quad SH \quad W \quad CF \quad CH \quad \} \\ Drive \quad 55 \times 4 = 395 = 35.44 \times 5 = 1925 = 54.51 \quad \} @ \text{ days wages}$$

Wages paid £ 20-16-0      Yonage to the mill - nil.  
 Cost per cu. in: 4/8

### Central Flats East.

No 3 Flatt West.

W. Watson and partner 52 days worked

$$L \quad W \quad SF \quad SH \quad W \quad CF \quad CH \quad \} \\ 18 \times 24 = 486 = 45.15 \times 11 = 4546 = 128.72 \quad \} 31 1/2 @ 30 ft per partner.$$

Yonage to the mill - 2 1/4 ton  
 Total money £ 52-15-3  
 Less costs £ 11-9-4  
 £ 41-5-11      Cost per cu. in: 6/5

No 2 Flatt going North.

C. Barwick and partner 22 days contract 30 days labouring.

$$L \quad W \quad SF \quad SH \quad W \quad CF \quad CH \quad \} \\ 9 \times 17 = 153 = 14.21 \times 11 = 1683 = 47.65 \quad \} 17 1/2 @ 30 ft per partner.$$

Yonage to the mill - 14 1/2 ton  
 Total money £ 18-7-6  
 Less costs £ 4-19-0  
 £ 13-8-6  
 Labouring £ 11-5-0  
 £ 24-13-6      Cost per cu. in: 10/4



Central Flatts

No 1 Flatt going East

A. Tarmley and partner

36 days worked

L	W	SF	SH	H	CF	CH	
18	x 7	= 126	- 11.70	x 7.5	= 94.5	= 26.75	} 13¢ @ 30¢ per fathom
19	x 6.5	= 123.5	- 11.27	x 7.5	= 92.6	= 26.27	
					<u>1871</u>	<u>52.97</u>	

Tonnage to the mill - 67 tons

Total money £ 19 10-0  
 Less costs £ 14-13-6  
£ 14-14-6

Cost per cu. m. 5/6

No 2 Flatt going North

J. Milham and partner

57 days worked

L	W	SF	SH	H	CF	CH	
12.5	x 25.5	= 319	- 29.80	x 9.5	= 302.8	= 85.74	} 21¢ at 31¢ per fathom

Tonnage to the mill - 180

Total money £ 32-11-0  
 Less costs £ 8-12-14  
£ 23-18-8

Cost per cu. m. 5/4

No 2 Flatt going West

J. Balkin and partner

52 days worked

L	W	SF	SH	H	CF	CH	
12	x 23	= 276	- 25.64	x 10	= 2760	= 78.15	} 19¢ @ 30¢ per fathom

Tonnage to the mill - 193 tons

Total money £ 28-15-0  
 Less costs £ 6-15-0  
£ 22-0-0

Cost per cu. m. 5/8

No 2 Flatt going West

J. Jackson and partner

52 days worked

L	W	SF	SH	H	CF	CH	
10	x 24	= 240	- 22.30	x 10	= 2400	= 67.96	} @ days wages

Tonnage to the mill - 160 tons

Wages paid £ 19-10-0

Cost per cu. m. 5/4

Chasing down lip heading

H. Varty and partner

51 days worked

L	W	SF	SH	H	CF	CH	
13	x 21	= 273	- 25.36	x 7	= 1911	= 54.11	} @ days wages
43	x 7	= 301	- 27.96	x 4	= 1204	= 34.09	
					<u>3115</u>	<u>88.20</u>	

Tonnage to the mill - 170 tons

Wages paid £ 22-19-0

Cost per cu. m. 5/3



No 4 Flat going north.

W. Atkinson and partner

78 days worked

$$\begin{array}{rcl}
 L & W & SF & SH & H & CF & CH \\
 19 \times 18 & = & 342 & - & 31.74 \times 16 & = & 5472 & - & 154.94
 \end{array}
 \left. \vphantom{\begin{array}{rcl} L & W & SF & SH & H & CF & CH \\ 19 \times 18 & = & 342 & - & 31.74 \times 16 & = & 5472 & - & 154.94 \end{array}} \right\} 38 \text{ ft @ } 33/6 \text{ per fathom}$$

Tonnage to the mill - 246 tons

$$\begin{array}{r}
 \text{Total money } £ \quad 63-13-0 \\
 \text{Less costs } £ \quad 9-8-8 \\
 \hline
 £ \quad 54-4-4
 \end{array}$$

Cost per cu. m. 7/

No 4 Flat north.

H. Lowe and partner

52 days worked

$$\begin{array}{rcl}
 L & W & SF & SH & H & CF & CH \\
 10.5 \times 22 & = & 231 & - & 2.446 \times 8 & = & 1848 & - & 52.33 \\
 7 \times 6 & = & 42 & - & 3.90 \times 5 & = & 210 & - & 5.94
 \end{array}
 \left. \vphantom{\begin{array}{rcl} L & W & SF & SH & H & CF & CH \\ 10.5 \times 22 & = & 231 & - & 2.446 \times 8 & = & 1848 & - & 52.33 \\ 7 \times 6 & = & 42 & - & 3.90 \times 5 & = & 210 & - & 5.94 \end{array}} \right\} @ \text{ days wages}$$

$$2058 - 58.27$$

Tonnage to the mill - 126 tons

$$\text{Wages paid } £ \quad 19-10-0$$

Cost per cu. m. 6/8

No 4 Flat west.

J. Robson and partner

51 days worked

$$\begin{array}{rcl}
 L & W & SF & SH & H & CF & CH \\
 11 \times 19 & = & 209 & - & 19.41 \times 4.25 & = & 1933 & - & 54.73
 \end{array}
 \left. \vphantom{\begin{array}{rcl} L & W & SF & SH & H & CF & CH \\ 11 \times 19 & = & 209 & - & 19.41 \times 4.25 & = & 1933 & - & 54.73 \end{array}} \right\} @ \text{ days wages}$$

Tonnage to the mill - 134 tons

$$\text{Wages paid } £ \quad 19-2-6$$

Cost per cu. m. 7/

No 5 Flat going north.

G. Grant and partner

52 days worked

$$\begin{array}{rcl}
 L & W & SF & SH & H & CF & CH \\
 12 \times 23 & = & 276 & - & 25.64 \times 13.5 & = & 3726 & - & 105.50
 \end{array}
 \left. \vphantom{\begin{array}{rcl} L & W & SF & SH & H & CF & CH \\ 12 \times 23 & = & 276 & - & 25.64 \times 13.5 & = & 3726 & - & 105.50 \end{array}} \right\} 25 \text{ ft @ } 33/6 \text{ per fathom}$$

Tonnage to the mill - 194 tons

$$\text{Total money } £ \quad 42-12-6$$

$$\begin{array}{r}
 \text{Less costs } £ \quad 6-8-4 \\
 \hline
 £ \quad 36-4-2
 \end{array}$$

Cost per cu. m. 6/10

## Rodderup Fell Mine & Mill

Mine. Owing to the falling off in value in the East End area most of the miners were removed to the West Central area. During the month 1857 tons was mined mainly from the Central area. The value was 6.6% compared with 5.75% in April. The outlook for June is fair values should be maintained & the output slightly increased. During the month, Dr Raistrick geologist at Kings College, Newcastle (formerly Armstrong College) spent a day at Rodderup. Dr Raistrick has investigated all the Flat deposits accessible in the North of England he states that the deposit of galena in the "Flats" in the Tyne Bottom Limestone is invariably near the top of the limestone say the top 6" or 8". He was most interested in the effect of the small faults & contemplates being able to spend two or three days in the mine in July & August to closely study the faulting. It is most probable that Dr ~~Smythe~~ Smythe an authority in faulting in the Pennines will accompany him. We have worked both the bottom & top sections of the limestone & occasionally have found payable mineral near the bottom. The best & most consistent random has been the top 6" to 8". The incline to the South section of the Flats was completed during May. It was found that the sides of the incline had fallen near the Vein. This must be recovered. We should be able to open out Flats in this area by the end of June or early July. On the whole, the prospects in Rodderup are brighter.

Mill. Owing to an insufficient supply of water for power the Campbell Engine ran several hours daily ~~the~~ the mill. The water supply was always sufficient for working. The mill is in good condition & the results satisfactory.



# Report on the Nenthead Mines June 1938

## Report on the Nenthead Mines

June 1938

	<u>Newshurg</u>	<u>Ranpkill</u>	<u>Rodderup</u>	<u>Totals</u>
Ore mined	1186 Tons		1569 Tons	2755 Tons
Ore milled	1186 "		1569 Tons	2755 "
Concentr. recd	84.5 "	The water supply was much better during June.	11.3 "	N 197.5 "
% of Galena	7.12%	1. Slender nugget	7.23%	7.12% 7.23%
Blende Concentr. recd	5.75 Tons	run 4 hours daily.		5.75 Tons
% of Blende	0.48%	1. Fuel oil required		N 0.48%
Hours worked	307 hours	run 12 hours daily.	288 hours	307 288 hours
Tons in know	3.86 Tons		5.45 Tons	3.86 5.45 Tons

## Stocks

	<u>Newshurg</u>	<u>Ranpkill</u>	<u>Rodderup</u>	<u>Wellhope</u>	<u>Totals</u>
				Tons	Tons
Crude oil	nil	nil	nil	2300	2300
Blende witherite	1125	250	150	nil	1525

rough blende 141.182 Tons  
 fine blende 141.140 "  
 Galena at Newshurg 35.420 Tons  
 Do at Rodderup 48.602 "  
 Pollers ore at Newshurg 87.12 Tons  
 Do " Rodderup 140.552 "

Coal consumed at Ranpkill 9 Tons  
 Fuel oil " " do 6 Tons  
 do " " Newshurg 3.5 "  
 do " " Rodderup 2.0 "

Compressed air produced at Newshurg & Wellhope  
 1000 cu. feet per min. Pressure at the face 80 lbs.

Compressed air produced at Rodderup 1200 cu. ft.  
 per min. Pressure at the face 80 to 85 lbs.

AT

Month of June 1938.									
Name of Vine	Cuba		Cuba		Cuba		Cuba		Total
	bu. ft.	lbs.	bu. ft.	lbs.	bu. ft.	lbs.	bu. ft.	lbs.	
1842	104	15962	88	14090	783				
1728	96	15910	125	14202	4124				
3482	194								
3828	213								
...	...	904212	102212	904212	80234	404212	80234	904212	80234
4846	242	6040	2338	58194	3866	60090	13313	85194	3866
...	...	11940	2330	41940	2330	41940	2330	41940	2330
642	34	21230	21230	349458	21098	384430	21133	349458	21098
18288	1616	471040	22140	4469426	81638	1386642	74037	1381104	46728
1200	67								
19485	1052								

(1)

N E N T S B U R Y      M I N E  
 00000000000000000000      00000000

J U N E   1 9 3 8.  
 00000000000000000000

DEVELOPMENT FOOTAGE:-      47 feet,      equals      14.32 metres.

Calculated Inches Galena:-      1.8 ins.

<u>BOUNDARY RISE.</u>	<u>LOW FLATT</u>	<u>DEADE.</u>
<u>R. Collin &amp; Partner.</u>		49.5 Days worked.
L.    H.    S.F.    S.M.    W.    C.F.    C.M.)	Days Wages	
47   x 7   - 329   - 30.56 x 5   - 1645   - 46.58)		
Tonnage to Mill:- NIL.		

Wages Paid £22: 5: 6.      Cost per Cu.M.:-      9/6.

<u>L. VEIN WEST PORTION S. OF S 2</u>	<u>TOP FLATT</u>	<u>2 1/2" GALENA.</u>
<u>G. Moffatt &amp; Parther</u>		49.5 Days worked
L.    H.    S.F.    S.M.    W.    C.F.    C.M.)	Days Wages	
Heading 9 x 22 - 198 - 18.40 x 10 - 1980 - 56.06)		
Tonnage to Mill:- 128 Tons.		

Wages Paid £19: 16: 0.      Cost per Cu.M.:-      7/1.

<u>L. VEIN EAST PORTION S. OF S 2</u>	<u>MIDDLE FLATT</u>	<u>1 1/2" GALENA.</u>
<u>G. Short &amp; Partner</u>		48.75 Days
L.    H.    S.F.    S.M.    W.    C.F.    C.M.)	Days Wages	
Drive 30 x 10 - 300 - 27.87 x 6 - 1800 - 50.97)		
Tonnage to Mill:- 100 Tons		

Wages Paid £19: 9: 0.      Cost per Cu.M.:-      7/8.

<u>L. VEIN STRING BETWEEN H. RAISE &amp; 1st SUN.</u>	<u>TOP FLATT</u>	<u>1 1/2" GALENA</u>
<u>Harold Johnston</u>		21.75 Days
L.    H.    S.F.    S.M.    W.    C.F.    C.M.)	Days Wages	
Heading 12 x 22 - 264 - 24.52 x 7 - 1848 - 52.34)		
Tonnage to Mill:- 104 Tons		

Wages paid £8: 14: 0.      Cost per Cu.M.:-      3/4

<u>S 2 VEIN STRING S. OF S 2 V.</u>	<u>MIDDLE FLATT</u>	<u>2" GALENA</u>
<u>T. Richardson</u>		25 Days
L.    H.    S.F.    S.M.    W.    C.F.    C.M.)	Days Wages	
Drive 10 x 12 - 120 - 11.16 x 6 - 720 - 20.38)		
Tonnage to Mill:- 44 Tons		

Wages Paid £10: 0: 0.      Cost per Cu.M.:-      9/10



HENTSBUURY MINE (2)

S 2 VEIN STRING S. OF S.2 IN MIDDLE FLATT 2" GALENA

Wm. Liverick & Partner 50 Days worked.  
L. H. S.F. S.M. W. C.F. C.M. }  
Stope 40 x 9 - 360 - 33.44 x 6 - 2160 - 61.15 } 5 Days Wages

Tonnage to Mill:- 134 Tons

Wages Paid £20: 0: 0. Cost per Cu.M.:- 6/6

S 2 VEIN EAST OF L.V. IN TOP FLATT 1" GALENA

Andrew Armstrong & Partner 43 Days worked  
L. H. S.F. S.M. W. C.F. C.M. }  
Heading 28 x 12 - 336 - 31.21 x 6 - 2016 - 57.08 } 5 Days Wages

Tonnage to Mill:- 108 Tons

Wages Paid £17: 4: 0. Cost per Cu.M.:- 6/-

D. VEIN BETWEEN H. RAISE & S.V. IN TOP FLATT 1 1/2" GALENA

T. Hudspeth & Partner 49 Days worked  
L. H. S.F. S.M. W. C.F. C.M. }  
Heading 24 x 13 - 312 - 28.98 x 6 - 1872 - 53.01 } 5 Days Wages

Tonnage to Mill:- 104 Tons

Wages Paid £19: 12: 0. Cost Per Cu.M.:- 7/5

COX VEIN N. OF H. RAISE IN LOW FLATT 2" GALENA

M. Short & Partner 48 Days worked  
L. H. S.F. S.M. W. C.F. C.M. }  
Stope 36 x 8 - 288 - 26.75 x 6 - 1728 - 48.93 } 1 5 Days Wages

Tonnage to Mill:- 107 Tons

Wages Paid £19: 4: 0. Cost per Cu.M.:- 7/10.

SINCAY VEIN STRING N. IN TOP FLATT 2" GALENA

H. Kiolty & Partner 49 Days Worked.  
L. H. S.F. S.M. W. C.F. C.M. }  
Drive 18 x 18 - 324 - 30.10 x 6 - 1944 - 55.04 } 5 Days Wages

Tonnage to Mill:- 121 Tons

Wages Paid £19: 11: 6. Cost per Cu.M.:- 7/1

SINCAY STRING S. OF T. VEIN IN TOP FLATT 2 1/2" GALENA

Clinton Stout & Partner 50 Days Worked  
L. H. S.F. S.M. W. C.F. C.M. }  
Stope 43 x 6 - 258 - 23.97 x 6 - 1548 - 43.83 } 1 5 Days Wages

Tonnage to Mill:- 101 Tons

Wages Paid £20: 0: 0. Cost per Cu.M.:- 9/1.



NEFTSBURY MINE (3)

T. VEIN STOPE E. OF D. VEIN LOW FLATT

2" GALENA.

James Liverick

23 Days worked

L.	H.	S.F.	S.M.	W.	C.F.	C.M.	
Stope 14	x 8	- 112	- 10.41	x 6	- 672	- 19.03	} 6 Days Wages

Tonnage to Mill:- 42 Tons.

Wages paid £8: 13: 0.

Cost per Cu.M.:- 9/1.

---

ADMIRALTY CONCESSION IN TOP FLATT. VERY LOW GALENA VALUES.  
(WORK STOPPED)

E. Graham & Partners

56.25 Days worked

L.	H.	S.F.	S.M.	W.	C.F.	C.M.	
Heading 10	x 20	- 200	- 18.58	x 6	- 1200	- 33.98	} 6 Days Wages

Tonnage to Mill:- 83 Tons

Wages paid £17: 3: 0.

Cost per Cu.M.:- 10/1.

## NENTSBURY MINE JUNE 1938

### GENERAL REMARKS RE. MINE AND MILL

NENTSBURY MINE. The number of days worked during June was 25. The Tonnage mined and treated was 1186 Tons. Concentrates produced amounted to 84.5 Tons Galena. The recovery per cent was 7.12. Blende Concentrates produced amounted to 5.75 Tons, with the value per cent 0.48.

The general position in Nentsbury is practically unchanged. There is a drop 0.34% in the Galena value and 0.52% in the Blende values. The Galena content will vary from month to month. Re: Blende we are doing as little as possible in the vein yielding blende and towards the end of June stopped all work in the Admiralty concession and removed the miners to work in Lord Allendale's Concession.

DEVELOPMENT. The Drive E. near the boundary to cut the N. & S. String or Vein, was driven 14.11 metres. In last month's report, I stated the Vein or String should be cut before the end of June. This we expected to do, and were disappointed we did not. We have continued driving and shall do so until we cut the string or reach a point E. where a Rise was put up from the main level. We have been informed on good authority that a small vein does exist and was worked by the V. M. company about 1921-2, from the Rise referred to. This Rise at the end of the month was about 50 feet or 9.14 metres E. of the Forebreast. It was considered when Messrs. Dupont, Chaplain and Cox visited Nenthead that if this small vein was payable, it would offset the output during July, as it should do. Unfortunately, up to date (July 8th) the vein has not been cut, consequently the output for July is not likely to derive much benefit from the cutting of this vein.

HEADINGS. Conditions unchanged.

MILL. Running well and in good condition.

POTTERS ORE. During June orders fell off considerably. There has been an improvement since.

WITHERITE. None produced.

GRAVEL SALES. Sales of Gravel have been effected by the very wet weather. They are improving and should be better during July if the weather is fine.

GENERAL REMARKS. I can add nothing in this report to what was stated when the Company's representatives from Head Office visited the mine in June. If as we hope the small vein is payable when cut, the outlook for Nentsbury will be much brighter. We shall immediately concentrate on driving South on this vein, when cut, with hope of cutting S 1 Vein if that vein exists so far W. There has been a slight rise in the price of lead but until we cut richer ore or the price rises to about £18 per ton, Nentsbury Mine will show a loss.

(1)

RODDERUP FELL MINE  
 OOOOOOOOOOOO OOOOOOO OOOOOOO

JUNE 1938  
 OOOOOOO OOOOOOO

DEVELOPMENT FOOTAGE :- 34 Feet, equals 10.20 Metres.

G. HIND & Partner 35.5 Days DEADS.  
 L. H. S.F. S.M. W. C.F. C.M. )  
 Drive 34 x 7 - 238 - 22.11 x 5 - 1190 - 35.70 ) @ Days Wages.

Tonnage to Mill:- NIL.

Wages Paid £14: 4: 0. Cost per Cu.M.:- 8/5

L. H. S.F. S.M. H. C.F. C.M. ) @ 33/6 per  
 Flatt 9 x 20.5 - 184.5 - 17.14 x 9.75 - 1799 - 50.94 ) fathom.

Tonnage to Mill:- 94 Tons.

Total Money £20: 18: 9.  
 Less Costs 4: 8: 2.

£16: 10: 7. Cost per Cu.M.:- 6/2

J. MILBURN & Partners 42 Days worked  
 L. H. S.F. S.M. H. C.F. C.M. )  
 5.5 x 25 - 137.5 - 12.77 x 9.75 - 1241 - 37.95 ) @ Days wages

Tonnage to Mill:- 188 Tons

Wages Paid £15: 15: 0. Cost per Cu.M.:- 8/5

T. JACKSON & Partner 46 Days worked  
 L. H. S.F. S.M. H. C.F. C.M. )  
 13 x 25 - 299 - 27.78 x 10 - 2990 - 84.66 ) @ 30/6 per fathom

Tonnage to Mill:- 137 Tons

Total Money £31: 15: 5.  
 Less Costs 6: 7: 0.

£25: 8: 5. Cost per Cu.M.:- 6/-

Wm. VARTY 10 Days worked  
 L. W. S.F. S.M. H. C.F. C.M. )  
 4 x 13 - 52 - 4.83 x 7 - 364 - 10.50 ) @ 30/6 Days Wages

Tonnage to Mill:- 182 Tons

Wages Paid £3: 15: 0. Cost per Cu.M.:- 7/3

RODDERUP FELL MINE (2).

J. ATKINSON & Partners. 71 Days worked  
 L. W. S.F. S.M. H. C.F. C.M. )  
 14 x 20 = 280 - 26.01 x 16 = 4180 - 126.85 } @ 31/6 per fathom

Tonnage to Mill:- 182 Tons

Total Money £19. 1. 9.  
 Less Costs 7. 11. 6.

£11. 10. 3.

Cost per Cu.M.:- 6/6.

H. LOWE & Partner 49 Days worked  
 L. W. S.F. S.M. H. C.F. C.M. )  
 16 x 22.5 = 360 - 33.44 x 8 = 2880 - 82.54 } @ 30/6 per fathom.

Tonnage to Mill :- 140 Tons

Total Money £20: 10: 0.  
 Less Costs 5: 18: 0.

£24: 12: 0.

Cost per Cu.M.:- 6/-

J. B. IRVING & Partner 48 Days worked  
 L. W. S.F. S.M. H. C.F. C.M. )  
 8 x 25 = 184 - 17.09 x 9 = 1656 - 46.89 )  
 2 x 19 = 38 - 3.53 x 9 = 342 - 9.68 {  
 21 x 3 = 63 - 5.05 x 4 = 252 - 7.13 } - @ Days Wages  
 2250 - 63.70 )

Tonnage to Mill:- 111 Tons

Wages Paid £18: 7: 6.

Cost per Cu.M.:- 5/9

C. GRANT & Partner 44 Days Worked  
 L. W. S.F. S.M. H. C.F. C.M. )  
 12 x 22.5 = 270 - 25.08 x 12 = 3240 - 91.74 } @ 31/6 per fathom

Tonnage to Mill:- 120 Tons

Total Money £35: 8: 9.  
 Less Costs 5: 19: 4.

£29: 9: 5.

Cost per Cu.M.:- 6/5

J. DALMIN & Partner 49 Days worked  
 L. W. S.F. S.M. H. C.F. C.M. )  
 9.5 x 26 = 247 - 22.94 x 10 = 2470 - 69.93 } @ Days Wages

Tonnage to Mill:- 176 Tons

Wages Paid £18: 7: 6.

Cost per Cu.M.:- 5/3

RODDERUP FELL MINE (3)

Central Flats East.

G. BARNICK & Partners 66 Days worked  
L. W. S.F. S.M. H. C.F. C.M. )  
17 x 24 = 408 - 37.90 x 11 = 4188 - 127.08 ) @ 31/6 per fathom

Tonnage to Mill:- 113 Tons

Total Money £49: 1: 9.  
Less Costs 10: 11: 6.

£38: 10: 3.

Cost per Cu.M.:- 6/1.

---

Wm. WATSON & Partner. 47 Days Worked  
L. W. S.F. S.M. H. C.F. C.M. )  
13 x 24 = 312 - 28.98 x 11 = 3188 - 97.18 ( )  
18 x 2 = 36 - 3.34 x 11 = 366 - 11.21 ) - @ 33/6 per fathom  
( )  
3828 - 108.39 )

Tonnage to Mill:- 188 Tons

Total Money £44: 13: 4.  
Less Costs 8: 12: 8.

£36: 0: 8.

Cost per Cu.M.:- 6/8.

---

BOUSE recovered from falls in Incline - 51 Tons  
BOUSE recovered from amongst Deads - 17 Tons.

---

## **RODDERUP FELL MINE & MILL JUNE 1938**

MINE. To improve the grade of ore mined, most of the Miners were removed from the East End Flatts to Flatts in the West Central Area. The grade rose from 6.6% in May to 7.23% in June, but the tonnage dropped from 1857 tons to 1569 tons. The number of days worked was 25 compared with 26 in June. The result does not show much if any Improvement. It was decided when the company's representatives visited the mines in June to stop all development and employ the miners on productive work. Arrangements were made to do this as from June 27<sup>th</sup>. During July only part of the benefit from this change will be felt, as it will take several days to open out the Flatts S of the Vein. At the date of writing (July 8th) the miners are employed opening out the Flatts in this area and by the end of July these Flatts should be in full operation. Unfortunately, miners are leaving our employment weekly for work on Government subsidised schemes on roads. During the past fortnight 6 miners have left. Pay on Government and council work is above the rate paid by the Company. As soon as possible contracts will be given to miners to improve their rates of pay. The difficulty is the standard rate of 7s/6d per day paid by us to miners and labourers compared with 8s/- per day paid by the Councils. The Council Employees also have other privileges.

Arrangements were made for trying to reduce the working places in two Flatts from 3 metres to 2 metres in height. This should result in higher grade ore being mined, but the cost per ton of ore mined in these places will increase. To get miners to work at a height of 2 metres we have been compelled to promise them the average rate of pay they have earned on the 3 metres and more height during the past six months.

In previous reports, I have informed Head Office that the values in the Flatts vary from week to week, and consequently only a month's average can be taken as representative of the true values of the mine, and even a longer period is more representative

A new Mining Act for metalliferous mines came into force on July 1<sup>st</sup>, and since that date, H. M. Inspector of Mines has inspected both mines (on July 5th and 6th). Generally, we were carrying out the provisions of the act, but certain additions such as wash-houses and changing houses for the minors must be provided and a little additional fencing in the mines and mills.

Every effort will be made to increase the tonnage but unless we are able to get more miners, the change-over will not result in an increase and may result in a decrease of tonnage. The mine generally is up to its normal value, and is yielding ore just over 7% recovery.

MILL. The supply of water was mainly ample during July for both washing and power, and consequently only 2 Tons of Fuel Oil was used to operate the Campbell Engine. The mill is not now fully supplied for 2 shifts - there may therefore be a slight increase in the cost per ton milled.





# Report on the Nenthead Mines July 1938

## Report on the Nenthead Mines

July 1938.

	<u>Nentshury</u>	<u>Rampgill</u>	<u>Rodderup</u>	<u>Totals</u>
Ore mined	1224 Tons	one steam engine	1688 Tons	2915 Tons
Ore milled	1224 do	can 9 hours daily.	1688 "	2915 "
Coal consumed per:	85.25 "	one fuel oil	124.65 "	N 2915 "
% of Galena	6.95%	Engine runs 6	7.38%	6.95% 7.38%
Blende Co. per	1.80 Ton	hours "		1 Ton
% of Blende	0.08%			N 0.28%
Hours worked	323 hours		314 hours	323 314 hours
Tons per hour	3.80 Tons		5.37 Tons	3.8 5.37%

## Stocks

	<u>Nentshury</u>	<u>Rampgill</u>	<u>Rodderup</u>	<u>Wellhope</u>	<u>Totals</u>
Crude ore	oil	oil	oil	2300 Tons	Totals 2300
Blende-witherite	1525	250	150	nil	1525

rough blende 14.682 Tons  
 fine blende 14.640 "  
 Galena at Nentshury 29.70 Tons. Potters ore at Nentshury 60.12 Tons  
 Do at Rodderup 32.802 " Do - Rodderup 109.716 "

Coal consumed at Rampgill 15 Tons  
 Fuel oil do " do 5 "  
 Do " - Nentshury 3 "  
 Do " - Rodderup 2 "

Compressed air produced at Nenthead & Wellhope  
 1000 cuft per min. Pressure at face 80 lbs.

Compressed air produced at Rodderup 1200 cuft.  
 per min. Pressure at face 80 to 85 lbs.

A.T.

Quota 1920-1921

Quota 1921-1922

Quota 1922-1923

Month of July, 1923

Production for Previous Months & R.	Quota Values		Balance Values		Previous Months & R.		Balance Values		Previous Months & R.		Balance Values	
	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota
Export Quota	1920	107	12170	646	12170	646	12170	646	12170	646	12170	646
Quota of R.R.	2532	141	71700	3953	71700	3953	71700	3953	71700	3953	71700	3953
Quota of R.R.	4284	238	-	-	-	-	-	-	-	-	-	-
Quota of R.R.	4074	234	-	-	-	-	-	-	-	-	-	-
Quota of R.R.	...	...	904212	50234	904212	50234	904212	50234	904212	50234	904212	50234
Quota of R.R.	4698	261	5066	2808	5066	2808	5066	2808	5066	2808	5066	2808
Quota of R.R.	...	...	41940	2330	41940	2330	41940	2330	41940	2330	41940	2330
Quota of R.R.	...	...	349458	21098	349458	21098	349458	21098	349458	21098	349458	21098
Quota of R.R.	18344	1019	4459940	81108	4459940	81108	4459940	81108	4459940	81108	4459940	81108
Quota of R.R.	18344	1019	4459940	81108	4459940	81108	4459940	81108	4459940	81108	4459940	81108

Quota of R.R. 512 ft

Name of Quota	Quota Values		Balance Values		Previous Months & R.		Balance Values		Previous Months & R.		Balance Values	
	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota	Quota
Export Quota	12170	646	12170	646	12170	646	12170	646	12170	646	12170	646
Quota of R.R.	71700	3953	71700	3953	71700	3953	71700	3953	71700	3953	71700	3953
Quota of R.R.	-	-	-	-	-	-	-	-	-	-	-	-
Quota of R.R.	-	-	-	-	-	-	-	-	-	-	-	-
Quota of R.R.	904212	50234	904212	50234	904212	50234	904212	50234	904212	50234	904212	50234
Quota of R.R.	50496	2808	50496	2808	50496	2808	50496	2808	50496	2808	50496	2808
Quota of R.R.	41940	2330	41940	2330	41940	2330	41940	2330	41940	2330	41940	2330
Quota of R.R.	349458	21098	349458	21098	349458	21098	349458	21098	349458	21098	349458	21098
Quota of R.R.	4459940	81108	4459940	81108	4459940	81108	4459940	81108	4459940	81108	4459940	81108

(1)

MONTH OF JULY 1938.

DEVELOPMENT FOOTAGE - 52 Feet - 15.84 Metres.

CALCULATED INCHES OF GALENA :- 1.75 inches.

BOUNDARY RISE DRIVE in the MIDDLE RANDOM. DEADS.

R. Collin & Partner.							50 Days Worked.
	L.	H.	S.F.	S.M.	W.	C.F. C.M.	} 6 Days wages.
Drive:-	27 x 7	- 189	- 15.57	x 5	- 945	- 26.75	
Rise:-	25 x 6	- 150	- 13.94	x 6	- 200	- 25.18	}
					<u>1845</u>	<u>52.23</u>	

Tonnage to Mill:- NIL.

Wages Paid £22. 2. 0.

Cost per Cu.M.:- 8/5.

L. VEIN EAST PORTION SOUTH OF S.2 in N. FLAT. 1.5" GALENA disseminated.

G. Short & Partner. 50½ Days worked.  
 L. H. C.F. S.M. W. C.F. C.M. )  
 Drive:- 30 x 10 = 300 - 27.87 x 5 = 1500 - 42.47 ) @ Days wages.

Tonnage to Mill:- 95 Tons

Wages Paid £20. 4. 0.

Cost per Cu.M. :- 9/6

L. VEIN WEST PORTION SOUTH OF S.2. in TOP FLAT. 2" GALENA disseminated.

G. Moffatt & Partner							50½ days worked.
	L.	H.	S.F.	S.H.	W.	C.F.	C.N.
Heading	22 x	7 -	154 -	14.32 x	6 -	924	-26.16
	5 x	22 -	110 -	10.22 x	10 -	1100	-31.15
						2024	-57.31
							@ Days Wages.

Tonnage to Mill:- 137 Tons.

Wages Paid £20. 6. 0.

Cost per Cu.M.: -7/1.

L. VEIN STRING between H. RAISE & S.1. in Top Flat. 1.5" GALINA in 2  
Ribs.

L. Liverick & Partner 35 days worked.  
 L. H. S.F. S.M. W. C.F. C.M. )  
 25 x 7 = 175 - 16.27 x 6 = 1050 - 29.72 ) @ Days wages

Tonnage to Mill:- 66 Tons.

Wages paid £14. 0. 0.

Cost per Cu.M. :- 9/5.

S.2 VEIN STRING from L.V. in the Middle Flat. 1.5" GALENA as 3 Ribs.

T. Richardson & ~~Partners~~. 26 Days worked  
L. H. S.F. S.M. W. C.F. C.M. )  
Drive 15 x 12 - 180 - 16.73 x 5 - 900 - 25.48 ) @ Days wages.

Tonnage to Mill:- 57 Tons.

Wages Paid £20. 8. 0.

Cost per Cu.M.:- 8/1.

NENTSBURY MINE.JULY 1938.

(2)

S.2 VEIN STRING, going EAST from D.VEIN in the MIDDLE FLAT. 2" GALENA as 2 Ribs.

W.Liverick & Partner 51 Days worked.  
 L. H. S.F. S.M. W. C.F. C.M. )  
 Stope:- 37 x 9 - 333 - 30.93 x 6 - 1998 - 56.57 ) @ days wages

Tonnage to Mill:- 142 Tons.

Wages Paid:- £20: 8: 0.

Cost per Cu.M.:- 7/2.

S.2 VEIN EAST OF L. VEIN in TOP FLAT. 1.5" GALENA disseminated.

A. Armstrong & Partner 44 1/2 Days worked.  
 L. H. S.F. S.M. W. C.F. C.M. )  
 Heading:- 8 x 12 - 96 - 8.92 x 6 - 576 - 16.31 )  
 Drive:- 17 x 12 - 204 - 18.95 x 6 - 1227 - 34.66 ) @ days wages  
 1800 - 50.97 )

Tonnage to Mill:- 117 Tons.

Wages Paid £17: 13: 0.

Cost per Cu.M.:- 7/-

D. VEIN between H.RAISE & S.V. in the TOP FLAT. 1.5" GALENA disseminated.

T.Hudspeth & Partner. 52 1/2 Days worked.  
 L. H. S.F. S.M. W. C.F. C.M. )  
 Heading ~~Excav~~ 40 x 5 - 200 - 18.58 x 6 - 1200 - 33.98 )  
 Drive 6 x 8 - 48 - 4.46 x 5 - 240 - 6.79 ) @ Days wages.  
 Side 30 x 4 - 120 - 11.16 x 4 - 480 - 13.58 )  
 1920 - 54.35 )

Tonnage to Mill:- 124 Tons

Wages Paid £21: 2: 0.

Cost per Cu.M.:- 7/9.

COX VEIN STRING NORTH OF H.RAISE in the LOW FLAT. 1.5" GALENA as 3 Ribs.

M.Short & Partner 50 Days worked.  
 L. H. S.F. S.M. W. C.F. C.M. )  
 Stope 46 x 7 - 322 - 29.91 x 6 - 1932 - 54.70 ) @ Days wages.

Tonnage to Mill:- 126 Tons

Wages paid £19: 19: 6.

Cost per Cu.M.:- 7/4.

SINCAVE VEIN STRING NORTH IN THE TOP FLAT. 2" GALENA as 2 Ribs.

Hugh Kielty & Partner 50 1/2 Days worked.  
 L. H. S.F. S.M. W. C.F. C.M. )  
 Drive 18 x 18 - 324 - 30.10 x 6 - 1944 - 55.04 ) @ Days wages

Tonnage to Mill:- 132 Tons

Wages paid £20: 4: 0.

Cost per Cu.M.:- 7/4.



NENTSBUURY MINE.

JULY 1938

(3)

SINCAY VEIN STRING NORTH OF T. VEIN in Top Flat. 2.5" GALENA as 5 Ribs.

C. Stout & Partner 52 Days worked.  
L. H. S.F. S.M. W. C.F. C.M. )  
Heading 20 x 13 - 260 - 24.15 x 9 - 2340 - 66.25 ) 6 Days wages

Tonnage to Mill:- 172 Tons

Wages paid £20. 16. 0.

Cost per Cu.M.:- 6/3.

---

T. VEIN STOPE BETWEEN L. & D. VEINS. 2.5" GALENA as 1 Rib.

James Liverick 24 Days worked (includes some labouring)  
L. H. S.F. S.M. W. C.F. C.M. )  
Stope:- 7 x 8 - 56 - 5.20 x 6 - 336 - 9.51 ) 6 Days wages.

Tonnage to Mill:- 25 Tons

Wages paid £9. 0. 0.

Cost per Cu.M.:- 19/-

---

COX VEIN NORTH OF T. VEIN IN TOP FLAT. 1" GALENA as 2 Ribs.

E. Graham & Partner 27 days worked.  
L. H. S.F. S.M. W. C.F. C.M. )  
Heading 20 x 5 - 100 - 9.29 x 6 - 600 - 16.99 ) 6 Days wages

Tonnage to Mill:- 34 Tons

Wages paid £7. 11. 0.

Cost per Cu.M.:- 8/10.

---



**NENTSBURY MINE  
JULY 1938**

**GENERAL REMARKS Re. MINE AND MILL**

NENTSBURY MINE. The number of days worked during June was 26.

The Tonnage mined and milled was 1227 Tons. Galena Concentrates produced amounted to 85.25 Tons. The recovery was 6.95%.

Blende concentrates produced 1 Ton with the value 0.08%.

The general position in the mine is similar to what was reported in June. In the early part of the month, the ore broken was lower in value, mainly because the miners were opening up Headings in three places in the bottom of the limestone where the ore is lower grade. Towards the end of the month the grade had somewhat improved. The Blende recovered is trifling in amount because all the Mining is carried out mainly in the Galena bearing veins.

DEVELOPMENT. All Development was suspended except research work in the western Area, where we are trying to find a working in a N. & S. Vein or String. In April, we reported cutting a string in the drift E. from the Rise near the Boundary. After consideration, it was decided to drive 50 feet further E. to cut a vein worked in 1921-2. We expected to cut this in May or at the latest in June. Not having done so we decided to rise on the first string cut. After rising 5 metres on this String it widened on the S. side, and it was possible to see that this is a Vein about 1 metre wide bearing N.W & S.E. This Vein has a displacement of 1 foot. The mineral content was not payable. On the N. side of the Rise there was 2" of Galena and Blende, mainly Galena, and on the S. side, about 12" of Blende with a little Galena.

Ventilation is bad, and to improve it, and ascertain where the X-Vein was worked in 1921-2, we decided to drive N. from the Rise to the old workings on High Raise Vein. We expect to cut into the old workings early in August. The ventilation should improve, if the workings are not fully blocked, and we hope to get into these workings and find the Vein. We consider the Vein we have found is not the one worked in 1921-2. It is disappointing that the Vein or String has not been found, as, if only payable, this yield from working would mean an increase of from 100 to 150 Tons of Ore per month, and 7 to 10 tons of Galena. We shall continue researching during August

HEADINGS. No Change.

MILL. Running well.

POTTERS ORE. Recently there has been a better demand for this.

WITHERITE. None produced. We have sent three samples of ore as broken in S1 and T Veins to Messrs. Athole G. Allen (Stockton) Ltd., and have asked them to make an offer per ton for this. If they can treat this ore as broken, and without hand picking, and pay us, say, 35/- per ton at the mine, we could no doubt send then 50 Tons or more monthly at a profit.

GRAVEL SALES. The sales of Gravel and Stone have improved.

GENERAL REMARKS. The immediate future re: Nentsbury is the finding of the small Vain in the Western area. If payable the result would reduce the monthly lose by about £100 per month, and by driving S. we would within 2 to 3 months cut the S1 Vein if that Vein continues South to this point. If both the X-Vein and S1 are payable in this area, and would yield ore from 8 to 10% Nentsbury monthly loss would before the end of the year be practically wiped out.

# RODDERUP FELL MINE & MILL JULY 1938

MINE. The number of days worked was 26. In June 6 miners left our employ. Towards the end of the month, we engaged two new men and hope to get more in August.

Taking the number of workmen into consideration the output for the month of July showed an improvement.

During the month, the Flats South of the Vein in the West Central Area were opened out. It must be realised that when opening out a new area either N. or S. of the Vein, the time required varies with the width of the Vein, which in some places taking the width of the N. String and the S. String, is sometimes a total width of seven metres. This width usually causes the distance from the S. side of the Vein to the Flats to be greater. The Flat in this area is now yielding ore of 7% and a contract has been set on the ordinary price of 30/- per fathom of 144 cu. ft.

During July an experiment arranged when representatives from Head office visited Rodderup in June to work two of the Flats in the very upper part of the limestone, where the mineralisation was richest, was tried. The results were as follows: -

a. John Dalkin & Partner worked 52 days @ 8s/8d per day.  
Tonnage to Mill .....92 Tons. Height worked 1.5 metres  
Cu. Ft. cut ....1656

Wages	£22.	10.	8.	Cost per ton, approx. 7s/3d
Explosives	£10.	14.	8.	Cost per Cu. Metre 14s/2d
				Cost per Fathom .... £2.80
Total Cost	£33.	5.	4.	

b. John Robson & Partner, worked 50 days @ 9s/2d per day.  
Height worked 1.5 metres. Cubic Feet cut .....1164 or 32.958 Cu. Metres  
Tonnage to Mill .... 65 tons

Wages	£22.	18.	4.	Cost per ton, approx. 9s/9d
Explosives	£8.	10.	10.	Cost per Cu. Metre 19s/1d
				Cost per Fathom .... £3.98
Total Cost	£31.	9.	2.	

c. Chas. Grant & Partner worked 51 days @ 12s/11d per day.  
 Height worked 2.13 metres. Cu. Ft. cut 1712 or 48.5 Cu. Metres  
 Tons broken ....95 Tons

Wages	£33.	11.	6.	Cost per ton, approx. 8s/6d
Explosives	<u>£6.</u>	<u>13.</u>	<u>4.</u>	Cost per Cu. Metre 16s/8d
Total Cost	<u>£40.</u>	<u>4.</u>	<u>10.</u>	Cost per Fathom .... £3.42

d. Percy Thompson & Partner worked 51 days @ 9s/1d per day.  
 Height worked 2.43 metres. Cu. Ft. cut 2116 or 60 Cu. Metres  
 Tons broken ....118 Tons

Wages	£23.	3.	3.	Cost per ton, approx. 5s/1d
Explosives	<u>£6.</u>	<u>14.</u>	<u>8.</u>	Cost per Cu. Metre 10s/-d
Total Cost	<u>£29.</u>	<u>17.</u>	<u>11.</u>	Cost per Fathom .... £2.04

The wages of these partnerships are calculated on an average for the past six months, with the exception of Robson 4 months, and the tons on 18 cu. ft per ton.

It took part of the month to get the miners accustomed to work in heights of 1.5 to 2.5 metres after working up to 3 and 3.5 metres. Consequently, the first month's results cannot be regarded as representative of an average month. It is a matter of judgement as to which of the two methods is most economical. Unless samples are taken daily and assayed, and the height compared, as well as the cost per ton of ore, it is not possible to make a correct statement re: the comparative methods. There is no object in breaking Limestone and tramping it, merely to record tonnage, but with a varying deposition of Galena, sometimes in the bottom of the Limestone, sometimes in the middle, but generally in the top, the method of working must be left entirely to the discretion and judgement of the officials.

The prospects for the output of ore for August seem better, and if there is no change in the mineral in the Flats the output of ore and the output of concentrates should be slightly better than for July.

MILL. The Mill ran well, and the supply of water was ample for washing, and generally, for power. The quantity of Fuel Oil used during the month was two tons only. The Mill is not fully supplied with ore for two shifts – consequently the cost per ton of ore milled is slightly higher than it should be. We hope there will be an increase in the tonnage milled in August.

(1)

DEVELOPMENT FOOTAGE - 18 feet - 5.48 metres.

Incline on the South Side.

Tonnage to Mill:- 106 Tons.

G. HIND & PARTNERS.

22 Days worked.

£55. 8. 2. Cost per Cu.M. :- 6/3.

J. DALKIN & PARTNER

52 Days worked (new method)

Tonnage to Mill:- 107 Tons.

Wages Paid £22. 10. 8. Cost per Cu.M. :- 2/7.

WM. VARTY & PARTNER.

43 Days worked.

Tonnage to Mill:- 187 Tons.

Wagon Paid £21. 10. 0.                      Cost per Cu.M. :- 3/10.

RODDERUP MINE.

JULY 1938

(2)

F. RENWICK & PARTNER.

50 Days worked.

L.	W.	S.F.	S.M.	H.	C.F.	C.M.)	
12.5	x 21	- 262.5	- 24.38	x 9.5	- 2494	- 7061	) @ 30s/-
5	x 7.5	- 37.5	- 3.48	x 5	- 187.5	- 530	) per fathom.
							)
						2681.5	75.91

Tonnage to Mill:- 140.

Total Money £28. 0. 0.  
Less Costs 5. 17. 8.

£22. 2. 4.

Cost per Cu.M.:- 5/9.

P. THOMPSON & PARTNER.

51 Days worked.

L.	W.	S.F.	S.M.	H.	C.F.	C.M.)	@ Days Wages.
11.5	x 23	- 264.5	- 24.56	x 8	- 2116	- 59.91	)

Tonnage to Mill:- 148

Wages Paid £23. 3. 3.

Cost per Cu.M.:- 7/8.

J.W. ROBSON & PARTNER.

50 Days worked.

L.	W.	S.F.	S.M.	H.	C.F.	C.M.)	@ Days wages.
10	x 24	- 240	- 22.30	x 4.5	- 1080	- 30.58	)

Tonnage to Mill:- 98

Wages Paid £22. 18. 4.

Cost per Cu.M.:- 14/11.

C. GRANT & PARTNER.

51 Days worked.

L.	W.	S.F.	S.M.	H.	C.F.	C.M.)	
8	x 28	- 224	- 20.81	x 7	- 1560	- 44.40	)
12	x 2	- 24	- 2.23	x 6	- 104	- 4.07	) @ Days Wages.
							)
						1712	- 48.47

Tonnage to Mill:- 147.

Wages Paid £32. 18. 9.

Cost per Cu.M.:- 13/7

F. WATSON & PARTNERS (4 Men)

101 Days Worked.

L.	W.	S.F.	S.M.	H.	C.F.	C.M.)	
23	x 30	- 690	- 64.10	x 11	- 7590	- 214.90	) @ 33s/6d per fathom.

Tonnage to Mill:- 285.

Total Money £88. 4. 4.  
Less Costs 18. 0. 4.

£70. 4. 0.

Cost per Cu.M.:- 6/6.

T. JACKSON & PARTNER.

52 Days worked.

L.	W.	S.F.	S.M.	H.	C.F.	C.M.)	
13	x 24	- 312	- 28.98	x 10	- 3120	- 88.34	) @ 31s/- per fathom.

Tonnage to Mill:- 177.

Total Money £53. 11. 8.  
Less Costs 7. 4. 4.

£26. 7. 4.

Cost per Cu.M.:- 5/11.





## Report on the Nenthead Mines August 1938

### REPORT ON THE NENTHEAD MINES. AUGUST 1938.

	<u>Nentsbury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Totals.</u>
Ore Mined	1183 Tons	One Steam	1866 Tons	3049 Tons.
Ore Milled	1183 "	Engine ran	1824 "	3007 "
Lead Concentrs.	81.5 "	daily 6 hours.	117.5 "	199 "
% of Galena	6.97%	One Fuel Oil	6.46%	6.97% (N) 6.46% (R)
Blende concs.	4.50 Tons	Engine ran 9	-	4.5 Tons (N.)
% of Blende	0.38%	hours daily.	-	0.38% (N.)
Hours Worked	323 hours.		347 hours.	323(N) 347(R.) hrs.
Tons per hour	3.66 Tons		5.25 Tons	3.66(N) 5.25(R.)

### S T O C K S.

	<u>N'bury.</u>	<u>Rampgill.</u>	<u>Rodd.</u>	<u>Wellhope.</u>	<u>Total.</u>
Crude Ore	NIL.	NIL.	42 Tons.	2300	2342 Tons.
Blende- Witherite.	1125 Tons.	250 Tons	150	NIL.	1525 Tons.

Rough Blende - 16.682 Tons  
Fine Blende - 17.140 "

Galena at Nentsbury, 24.95 Tons, Potters Ore at Nentsbury, 40.37 Tons.

Galena at Rodderup, 24.102 Tons, Potters Ore at Rodderup, 60.405 Tons.

Coal consumed at Rampgill	11.80 Tons
Fuel Oil " " "	7.50 "
Do. " " Nentsbury	3.75 "
Do. " " Rodderup	2.50 "

~~XX~~

Compressed Air produced at Nenthead and Wellhope,

1000 cu.feet per minute. Pressure in the Mine 80lbs per sq. inch.

Compressed Air produced at Rodderup 1200 cu. feet per minute

Pressure in the Mine 80 to 85 lbs. per sq. inch.

Le 1<sup>er</sup> Dec. de l'an 18.

*Ch. P. P. P.*

Sheet No 129.

Month of August 1938.

Production from Previous Month's A.R.			Balance Value		Balance Value		Balance Value	
Month & Day	bu. ft.	Cyrs.	Previous Month's A.R.	bu. ft.	Cyrs.	Previous Month's A.R.	bu. ft.	Cyrs.
1st of Nov	1248	64	676	10822	604			
2nd of Nov	3486	190	5883	68234	3493			
3rd of Nov	5024	249						
4th of Nov	7126	346						
5th of Nov	2946	164	804212	404212	56234	904212	50234	50234
6th of Nov			50496	44550	2641	50496	2641	
7th of Nov			41940	41940	2330	41940	2330	
8th of Nov	336	19	349422	349422	21061	349422	21061	21061
9th of Nov	2006	111	4489940	4489940	50666	1346040	764449	1282234

Water in vent Passage - 40 ft  
R.R. by development - nil.

Name of Ship	Cuba - Policy			St. Louis - Policy			St. Louis - Policy		
	Ins.	Sub. ft.	Rate	Ins.	Sub. ft.	Rate	Ins.	Sub. ft.	Rate
Expend. Ship	607	109.22	80						
Ex. V.S. of S.R.	3493	652.44	189						
Shanty Ship									
Harwick Ship									
1 <sup>st</sup> Ship Ship	50234	9042.12	2511	50234	9042.12	5023	50234	9042.12	50234
2 <sup>nd</sup> Ship Ship	2641	475.50	188	2641	475.50	396			
High Rate	2330	419.40	140	2330	419.40	156			
Victor Ship	21061	3490.86	1053	21061	3490.86	1058	21061	3490.86	21061
	80666	556	4081	80666	556	4290	80666	556	80666
	1451984			1451984		4290	1451984		1451984

DEVELOPMENT FOOTAGE :- 40 feet, equals 12.15 metres.

R. Collin & Partner.

42 Days Worked.

R. Collins & Partners.		L		H		S.F.		S.M.		W.		C.F.		G.M.		Days	
Rise	5	x	6	-	30	-	2.78	x	6	-	180	-	5.09	)			6 Days
Drive	35	x	7	-	245	-	22.76	x	5	-	1235	-	34.69	)			Wages.
											1405	-	39.78	)			

Wages Paid:- £19: 16s: 0d.

Cost per Cu.M.:- 9s/11d.

"L" VEIN EAST SOUTH of "G.2" VEIN, in the Middle Rand. 1.5" GALENA  
in 2 lbs.

G. Short & Partner.

43 Days Worked.

L	H	S.F.	S.M.	W.	C.F.	C.M.
26	x 12	- 312	- 28.90	x 6	- 1872	- 53.01
14	x 3	- 42	- 3.90	x 6	- 252	- 7.13
					2124	60.14

6 Days Wages

Wages Paid:- ~~£222~~ £17: 4s: 0d.

Cost per Cu.M. :- 5s/8d.

"L" VEIN WEST SOUTH OF "G.2" VEIN, in the TOP FLAT.      2" GALENA  
disseminated.

G. Moffatt & Partner.

57 Days Worked.

	L	H	S.F.	S.M.	W.	C.F.	C.M.	Days	Wages
Heading 13 x 22 -	206	-	26.57	x	9	-	2570	x	- 72.88

Wages Paid £22: 16s: 0d.

Cost per Cu.M. :- 6s/3d.

"L" VEIN STRING between HIGH RAISE & "S.1" VEINS in TOP FLAT, 1.5" GALENA  
as 2 ribs.

L. Liverick

26 Days Worked.

Heading 20 x 5 - 100 - 9.29 x 6 - 600 - 16.99 ) 6 Days Wages

Wages Paid £10: 8: 0d.

Cost per Cu.M.:~ 12s/3d.

1" VEIN STRING EAST of EAST PORTION, in MIDDLE RANDOM. 2" GALENA as  
3 Ribs.

A. Armstrong & Partner

52 Days Worked.

Drive  $\frac{L}{24} \times \frac{H}{12} = \frac{S.F.}{200} = \frac{S.M.}{26.75} \times \frac{W}{6} = \frac{C.F.}{1728} = \frac{C.M.}{48.93}$  ) @ Days Wagon

Wages Paid £20: 16s: 0d.

Cost per Cu.M.:- 8s/6d.

NENTSBUY MINE.

"S.2" VEIN STRING SOUTH OF "S.2" VEIN in MIDDLE RANDOM. 1.5" GALENA  
as 1 Rib.

T. Richardson 26 Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
Drive 14 x 12 - 168 - 15.61 x 5 - 840 - 23.78 ) 4 Days Wages

Tonnage to Mill:- 40 Tons

Wages Paid £10. 8s. Od.

Cost per Cu.M.:- 8s/9d.

"S.2" VEIN STRING SOUTH OF "S.2" EAST in the MIDDLE FLAT. 2.5" GALENA  
as 2 Ribs.

W. Liverick & Partner 52 Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
39 x 9 - 351 - 32.61 x 6 - 2106 - 59.63 ) 6 Days Wages

Tonnage to Mill:- 120 Tons

Wages Paid £20. 16s. Od.

Cost per Cu.M.:- 7s/-

"D" VEIN between H.R. & S.1 VEIN in TOP FLAT. 1.5" GALENA disseminated.

T. Hudspeth & Partner. 49 Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
Heading 16 x 13 - 208 - 19.32 x 6 - 1248 - 35.34 ) 6 Days Wages

Tonnage to Mill:- 64

Wages Paid £19. 12s. Od.

Cost per Cu.M.:- 11s/1d.

COX VEIN STRING NORTH OF H. RAISE in MIDDLE FLAT 1.5" GALENA disseminated

M. Short & Partner. 46 Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
Stope 28 x 7 - 196 - 18.21 x 6 - 1176 - 33.30 ) 6 Days Wages

Tonnage to Mill:- 60 Tons

Wages Paid £18. 7s. 6d.

Cost per Cu.M.:- 11s/-

SINCAY VEIN STRING NORTH in the TOP FLAT 2" GALENA as 2 Ribs.

H. Kielty & Partner 46 Days Worked  
L H S.F. S.M. W C.F. C.M. )  
Drive 20 x 18 - 360 - 33.44 x 6 - 2160 - 61.16 ) 6 Days Wages

Tonnage to Mill:- 122 Tons

Wages Paid £18. 7s. 6d.

Cost per Cu.M.:- 6s/-

SINCAY VEIN STRING SOUTH OF "T" VEIN in the TOP FLAT 3" GALENA DISSEMINATED

C. Stout & Partner. 52 Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
Heading 16 x 13 \* 208 - 19.32 x 11 - 2288 - 64.78 )  
Drive 16 x 6 - 96 - 8.92 x 6 - 576 - 16.31 ) 6 Days Wages  
2864 - 81.09 )

Tonnage to Mill:- 180 Tons

Wages Paid £20. 16s. Od.

Cost per Cu.M.:- 5s/1d.

NENTSBURY MINE.

5

"T" VEIN STOPE in the LOW FLAT.

2" GALENA as 1 Rib.

J. Liverick.

23 Days Worked.

	L	H	S.F.	S.M.	W.	C.F.	C.M.								
Stope	7	x	8	-	56	-	5.20	x	6	-	336	-	9.51	)	6 Days Wages.

Tonnage to Mill:- 19 Tons.

Wages Paid £8. 12s. 6d.

Cost per Cu.M.:- 18s/1d.

COX VEIN NORTH OF "T" VEIN in TOP FLAT.

2" GALENA as 2 Ribs.

E. Graham & Partner.

52 Days Worked.

	L	H	S.F.	S.M.	W	C.F.	C.M.								
Heading	25	x	19	-	475	-	44.13	x	6	-	2850	-	80.70	)	6 Days Wages.
LESS	20	x	5	-	100	-	9.29	x	6	-	600	-	16.99	)	
											2250	-	63.71	)	

Wages Paid £16. 18. 0.

Cost per Cu.M.:- 5s/3d.

**NENTSBURY MINE  
AUGUST 1938**

**REMARKS RE: MINE & MILL**

NENTSBURY MINE. The numbers of days worked was 26.  
The tonnage mined and milled was 1183 Tons. Galena concentrates produced amounted to 81.50 Tons. The recovery was 6.97%.  
Blende concentrates produced amounted to 4.5 Tons. The recovery was 0.38%.

The general position of the mine is unchanged. The outlook for September is consequently similar to the outlook for August.

DEVELOPMENT. During the month, we reported by letter that the Drive E. in the Western Area, to cut a String or Vein reported to have been cut in 1921-22 and left with more or less payable values, was found by driving North on the Small Vein we passed through in April, which when communication was made with the old workings on the High Raise Vein, enabled us to get down and find the level driven south on the Small Vein from High Raise. This level was driven 28 feet and was 8 feet directly below us. The Vein was poor and unpayable. I reported immediately and stated the miners from this place were transferred to places in mineral bearing ground in the Eastern area. The result of our investigation in this area has been disappointing. At present, we are doing no development in Nentsbury.

HEADINGS. No change

MILL. Running satisfactorily

POTTERS ORE. The usual average quantity was dispatched, mainly to Antwerp.

WITHERITE. A Report on the samples sent to Messrs. Athole G. Allen (Stockton) Ltd., Stockton-on-Tees, and my visit to their works, was sent to Mr. Chaplain on September 1<sup>st</sup>. No further information has yet come to hand. Immediately Messrs. A. G. Allen send their report of the last sample sent, and should they be able to deal with the Middlings and make a reasonable offer we will go carefully into the matter and report at once.

GRAVEL SALES. The sales of Stone, Gravel and Sand have been maintained.

GENERAL REMARKS. The blocked out tonnage in the Veins containing Galena only is small, and at the end of 1938, unless we discover more side Veins and Strings, which fortunately have augmented the supply of ore to the Mill, this year, the outlook for 1939 will not be good. The blocked out tonnage in "S.1", "T" & "S.2" Veins, containing Galena, Blende, and Witherite, is sufficient to supply the Mill for 3 to 4 years, if a separation of the minerals can be made without much expense, and if a market can be found for Witherite.



Any reasonable offer made by Messrs. A.G. Allen Ltd., should be carefully examined.

The estimated tonnage in S.1. Vein alone, at the end of July was 50234 Tons. In many places this vein is very wide, and as the level driven never exposed both walls of the Vein, it is possible that a North and South Vein may have crossed, "S.1" Vein without it being seen in the level driven. The width of "S.1" in places was from 20 to 30 feet wide, and although X-Cuts were put out periodically, and Rises put up, it is not improbable that if the minerals in "S.1" could be separated to meet expenses, and the Vein worked in bulk, discoveries of N. and S. Veins might be made, and richer Galena ore found. We await Messrs. Allen's report with interest.

In 1927-28, when working the "S.1" Vein, East of Cox and D. Veins, and West of Liverlck, a Side Vein, about 5 feet wide, and carrying 6" to 8" of Galena, was found in the South side, and actually yielded more Galena than the main "S.1" Vein.

$\frac{8}{1}$ 

DEVELOPMENT FOOTAGE:- N I L.

C. Grant & Partner.

42 Days Worked.

$$9 \times 26 = 234 - 21.74 \times 7 = 1638 - 46.38 \text{ ) } \text{ @ Days Wages.}$$

Wages Paid £27. 2s. 6d.

Cost per Cu.M.:- 11s/8d.

55 Days Worked.

L.            W.            S.F.            S.M.            H.            C.F.            C.M.            )  
12.5 x 258 - 312.5 - 29.02 x 7.75 - 34.22 - 68.57 ) a Days Wages

Wages Paid £24. 19s. 7d.

Cost per Cu.M. :- 7s/3d.

50 Days Worked.

L      W      S.F.   S.M.   H.   C.F.   C.M.   )  
 10 x 25.5 - 255 - 23.69 x 4.5 - 1147 - 32.49 ) 3 Days Wages

Wages Paid £22. 18s. 4d.

Cost per Cu.M.:- 14s/2d.

50 Days Worked.

9 x 33.5 = 301.5 - 28.0 x 4.5 = 1357 - 38.41) @ Days Wages.

Wages Paid £21. 13s. 4d.

Cost per Cu.M. :- 11s/3d.

95 Days Worked.

L	W	S.F.	S.M.	H	C.F.	C.M.	)
17	x 24	= 408	= 37.90	x 12	= 4896	= 138.63	)
10	x 15	= 150	= 13.93	x 8	= <u>1200</u>	= <u>33.98</u>	)
							)
					<u>6096</u>	= <u>172.61</u>	)

42 Fathom 2 feet  
@ 32s/6d.

Total Money £ £68. 15s. 10d.

Less Explosives 17. 15s. Cd.

(58/11d)

£51. 0s. 10d.

Cost per Cu.M.:- 5s/11d.

RODDERUP MINE.

9.

G. Hind & Partners.

73 Days Worked.

L	W	S.F.	S.M.	H.	C.F.	C.M.	)	
8 x 25	-	200	-	18.58 x 8	-	1600	-	45.30
11 x 29	-	319	-	29.63 x 10.25	-	3269	-	92.58
						4869	-	137.88

33 Fathom 5 feet @ 32s/6d.

Tonnage to Mill:- 278 Tons

Total Money £54. 19s. 7d.  
Less Explosives 13. 0s. 4d.

£41. 19s. 3d. Cost per Cu.M.:- 6s/1d.

T. Jackson & Partner.

52 Days Worked.

L	W	S.F.	S.M.	H.	C.F.	C.M.	)	
11 x 23	-	253	-	23.51 x 10	-	2530	-	71.64

17 Fathom 3 feet @ 30s/-

Tonnage to Mill:- 173 Tons.

Total Money £26. 5s. 0d.  
Less Explosives 6. 4s. 4d.

£20. 0s. 8d. Cost per Cu.M.:- 5s/7d.

Wm. Varty & Partner.

54 Days Worked.

L	W	S.F.	S.M.	H.	C.F.	C.M.	)	
29 x 16	-	464	-	43.12 x 6	-	2784	-	78.83

@ Days Wages

Tonnage to Mill:- 160 Tons.

Wages Paid £25. 13s. 0d. Cost per Cu.M.:- 6s/6d.

F. Renwick & Partner.

51½ Days Worked.

L	W	S.F.	S.M.	H.	C.F.	C.M.	)	
11 x 22	-	242	-	22.48 x 9.5	-	2299	-	65.10
16 x 4	-	64	-	5.94 x 8.0	-	512	-	14.50
6.5 x 15.5	-	100.75	-	9.35 x 3.0	-	302	-	8.55
						3113	-	88.15

16 Fathom @ 30s/-  
@ Average of Wages made on Contract.

Tonnage to Mill:- 162 Tons.

Total Money £24. 0s. 0d.  
Less Explosives 4. 8s. 8d.

Plus Days Wages £19. 11s. 4d.  
for 10 Days:- 4. 14s. 4d.

Total Amount Pd. £24. 5s. 8d. Cost per Cu.M.:- 5s/6d.

D. Dickinson.

26½ Days Worked.

L	W	S.F.	S.M.	H.	C.F.	C.M.	)	
13 x 14	-	182	-	16.91 x 10.5	-	1911	-	54.11

13 fathom 2 feet @ 30s/-.

Tonnage to Mill:- 103 Tons.

Total Money £ 220. 0s. 0d.  
Less Explosives 3. 17s. 4d.

£16. 2s. 8d. Cost per Cu.M.:- 6s/-.

RODDERUP MINE.

10.

CENTRAL FLATS SOUTH OF INCLINE.

T. Bushby & Partner.

50 Days Worked.

L      W      S.F.      S.M.      H.      C.F1      C.M.      )      29 Fathom 2 feet  
18.5 x 19 - 351.15 - 32.65 x 12 - 4218 - 119.43 )      @ 33s/6d.

Tonnage to Mill:- 117 Tons.

Total Money      £49. 2s. 8d.

Less Explosives      9. 2s. 8d.

£40. 0s. 0d.

Cost per Cu.M.:- 6s/8d.

## RODDERUP MINE & MILL AUGUST 1938

MINE. The number of days worker was 26 during August. The Tonnage mined was 1866 Tons, and the Tonnage milled, 1824Tons, from which 117.15 Tons of Galena Concentrates were produced. The recovery was 6.46%

The percentage of ore in several of the Flats in the middle of August was lower, and although the ore was picked as clean as possible the average grade sent to the Mill during August was lower in consequence. Towards the end of August, the grade improved. It must be remembered that the deposition of ore in a "Flat" is unlike that in a "Vein" where the ore is generally concentrated within the walls of the Vein. In the case of the Big Limestone, the ore in a Vein, is generally poorer in the first 5 metres of the Limestone, improves in quality in the second 5 metres, and generally maintains its value in the top 5 metres. The thickness of the Limestone is approximately 15 metres. It is referred to in 3 heights of 5 metres each known locally as the Bottom, Middle and Top Randoms. In Flats such as we have at Rodderup where the Tyne Bottom Limestone is approximately 24 feet thick, about 8 metres, there are no "randoms", and although the richest ore is generally found in the top, it is not always so, and often the middle and bottom parts of the Limestone contain payable minerals. Such being the case it is difficult to work the deposit month after month in the same manner.

It will be remembered that in June, when representatives of Head Office visited the mine, it was decided that an experiment should be carried out in two or three Flats where at the time the mineral was in the top 1.5 to 2 metres of the Limestone. This at the time seemed the wisest course to adopt.

The results reported for July were not encouraging.

The following are the results for August. These are equally discouraging. Viz: -

	August 1938	July 1938
<b>J. DALKIN &amp; PARTNER</b>		
Days Worked	50	52
Wages paid	£21. 13s. 4d.	£22. 10s. 8d
Cost per Cu. Metre	11s/3d	9s/7d
Cubic Metres Cut	38.41	46.89
<b>J. ROBSON &amp; PARTNER</b>		
Days Worked	50	50
Wages paid	£22. 18s. 4d.	£22. 18s. 4d
Cost per Cu. Metre	14s/2d	14s/11d
Cubic Metres Cut	32.49	30.58
<b>C. GRANT &amp; PARTNER</b>		
Days Worked	42	51
Wages paid	£27. 2s. 6d.	£32. 18s. 9d
Cost per Cu. Metre	11s/8d	13s/7d
Cubic Metres Cut	46.38	48.47

P. THOMPSON & PARTNER

Days Worked	55	51
Wages paid	£24. 19s. 7d.	£23. 3s. 3d
Cost per Cu. Metre	7s/3d	7s/8d
Cubic Metres Cut	68.57	59.91

The three partnerships Dalkin, Grant, and Robson, cost per cubic metre in August, 9s/7d, 11s/7d, and 14s/2d respectively. The average cost per cubic metre for all the other partnerships was 6s/2d. The average of the above 3 partnerships 11s/9d per cubic metre, or 92% higher. The results are very unsatisfactory. Consequently, we have decided to alter the methods. We shall continue to break the least possible amount of barren rock and pick the ore as clean as possible. In the case of C. Grant & Partner, I do not consider they have cut as much Ground as they should have done, when taking into consideration their Flat was 2.12 metres high, and unless they do more they will be dismissed

Please Note. Explosives costs are not included in this month's costs. The cost per cubic metre is Labour Cost only. The amount of explosives used is given in the comparative statement in the Report, and the amount of explosives, per ton of Ore mined is also given. The miners on contract pay the cost of Explosives used, which amount is shown in the report and deducted from the Gross Amounts. The cost per cubic metre stated for each partnership is the Labour Cost only. Whether Miners are working on contract or days wages, all explosives are ordered by a written requisition signed by the Foreman, and an accurate and complete record is kept. This method can be altered to include Explosives Cost, but if so it will effect most of the totals in Comparative Statement Sheet.

At the end of August, the appearance of the ore in the Flats was quite up to the average and indicated that if there is no falling off during the month, the output of Concentrates would be fully maintained. The monthly output depends upon the grade of ore broken. We have no blocked out rich deposit from which we can break good ore to maintain an average grade. Every effort is made to produce as much ore as possible of the highest grade obtainable at the lowest possible cost.

MILL. Except for an accident to the Crusher when the crankshaft was bent by a hammer-head accidentally falling into the Jaws, the Mill ran well. We hope to increase the quantity of ore from the mine during September. If we are successful the Milling Costs should show a slight reduction.





# Report on the Nenthead Mines September 1938

## REPORT ON THE NENTHEAD MINES. SEPTEMBER 1938.

	<u>Nentsbury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Totals.</u>
Ore Mined.	1222 Tons	One Steam Engine ran	1954 Tons	3176 Tons.
Ore Milled.	1222 "	5.5 hours daily.	1996 "	3218 "
Lead Cones. Produced	82.75 "	Fuel Oil Engine ran 9 to 10 hrs daily.	132.55 "	215.30 "
% of Galena Blende Cones. Produced	6.77%		6.64%	N. R. 6.77% 6.64%
% of Blende	5.32 Tons		-	N. 5.32 Tons.
Hours Worked	317 Hrs.		333 Hrs.	N. R. 317 333
Tons per Hr.	3.85 Tons		6.00 Tons	N. R. 3.85 6.00

### STOCKS.

	<u>Nentsbury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Wellhope.</u>	<u>Totals.</u>
Crude Ore	NIL	NIL.	NIL.	2300 Tons	2300 Tons.
Blende-Witherite	1125 Tons	250 Tons	150 Tons	NIL.	1525 Tons.

Rough Blende - NIL.  
Fine Blende - NIL.

Galena at Nentsbury: 14.20 Tons. Potters Ore at Nentsbury: 37.012 Tons.  
Do. at Rodderup: 8.452 " Do. Do. at Rodderup: 36.055 " .

Coal Consumed at Rampgill:- 10 Tons.  
Fuel Oil " " " :- 7 " .  
" " " " Nentsbury:- 3 " .  
" " " " Rodderup:- 2 " .

COMPRESSED AIR produced at Nenthead and Wellhope, 1000 cubic feet per minute: Pressure at face, 80 lbs.

COMPRESSED AIR produced at Rodderup, 1200 cubic feet per minute: Pressure at face, 80 to 85 lbs per sq. inch.

Month of September 1926									
Galena Values				Blaine Values				Totals	
Previous Month's A.R.		A.R. Remaining		Previous Month's A.R.		A.R. Remaining		Previous Month's A.R.	
bu ft	lbs	bu ft	lbs	bu ft	lbs	bu ft	lbs	bu ft	lbs
1680	93	10922	604	9242	514				
4068	226	68274	3795	64206	3567				
4146	232								
6590	366								
		904212	50234	904212	50234	904212	50234	904212	50234
2954	164	44550	2641	44596	2477	44596	2477		
		41940	2330	41940	2330	41940	2330		
	43	379086	21061	378318	21018	378318	21018	378318	21018
	1124	1451984	80666	1442514	80140	1372788	76059	14295128	76250
20286									

Month of September 1926									
Galena Values				Blaine Values				Totals	
Previous Month's A.R.		A.R. Remaining		Previous Month's A.R.		A.R. Remaining		Previous Month's A.R.	
bu ft	lbs	bu ft	lbs	bu ft	lbs	bu ft	lbs	bu ft	lbs
9242	514	514	26						
64206	3567	3567	178						
904212	50234	50234	2511	904212	50234	50234	2511	904212	50234
44596	2477	2477	149	44596	2477	2477	149		
41940	2330	2330	140	41940	2330	2330	140		
378318	21018	21018	1051	378318	21018	21018	1051	378318	21018
1442514	80140	80140	4085	1442514	80140	1442514	4085	1442514	80140

NENTSBURY MINE (CONTINUED).

S.2 VEIN STRING SOUTH OF S.2 MIDDLE FLAT 2" GALENA.

Wm. Liverick & Partner. 52 Days Worked.  

L	H	S.F.	S.M.	W.	C.F.	C.M.
Drive 27 x 10	-	270	-	25.07 x 6	-	1620 - 45.86

 ) 3 Days Wages

Tons to Mill:- 103 Tons.

Wages Paid £20: 16: 0. Cost per Cu.M.:- 9/1.

DUPONT VEIN BETWEEN H. RAISE & S1.VEIN IN TOP FLATT 1.5" GALENA.

T. Hudspeth & Partner 49 Days Worked.  

L	H	S.F.	S.M.	W.	C.F.	C.M.
Heading 28 x 10	-	280	-	25.99 x 6	-	1680 - 47.56

 ) 3 Days Wages

Tons to the Mill:- 92 Tons.

Wages Paid:- £19: 12: 0. Cost per Cu.M.:- 8/3.

COX VEIN STRING NORTH OF HIGH RAISE IN TOP FLAT. 2.5" GALENA.

M. Short & Partner. 47 Days Worked.  

L	H	S.F.	S.M.	W.	C.F.	C.M.
Heading 30 x 15	-	450	-	41.80 x 6	-	2700 - 76.45

 ) 3 Days Wages

Tons to Mill:- 188 Tons.

Wages Paid:- £18: 16: 0. Cost per Cu.M.:- 4/11.

COX VEIN NORTH OF T. VEIN. TOP FLAT 2" GALENA.

E.Graham & Partner. 43½ days Worked  

L	H	S.F.	S.M.	W.	C.F.	C.M.
Heading 12 x 19	-	228	-	21.18 x 6	-	1368 - 38.73

 ) 3 Days Wages

Tons to Mill:- 84 Tons

Wages Paid:- £15: 8: 0. Cost per Cu. M.:- 6/11.

SINCAY VEIN STRING NORTH OF T. VEIN TOP FLAT. 2" GALENA.

H. Kieilty & Partner. 50 Days Worked.  

L	H	S.F.	S.M.	W.	C.F.	C.M.
Drive 20 x 18	-	360	-	33.44 x 6	-	2160 - 61.15

 ) 3 Days Wages

Tons to Mill:- 132 Tons.

Wages Paid £19: 19: 6. Cost per Cu.M.:- 6/6.

SINCAY VEIN STRING SOUTH OF T. VEIN TOP FLAT. 2" GALENA.

C.Stout & Partner. 52 Days Worked.  

L	H	S.F.	S.M.	W.	C.F.	C.M.
Stops 27 x 4	-	108	-	10.03 x 6	-	648 - 18.34
Drive 24 x 8	-	192	-	17.84 x 6	-	1152 - 32.62
4 x 9	-	36	-	3.34 x 6	-	216 - 6.11
						2016 57.07

 ) 3 Days Wages.

Tons to Mill:- 123 Tons.

Wages Paid:- £20: 16: 0. Cost per Cu.M.:- 7/3

NENTSURY MINE (CONTINUED)

5

T. VEIN STOPE.

2" GALENA.

James Liverick.

25 Days Worked.

	<u>L</u>	<u>H</u>	<u>S.F.</u>	<u>S.M.</u>	<u>W.</u>	<u>C.F.</u>	<u>C.M.</u>	<u>)</u>
Stope 16 x 8 -	128	-	11.90	x 6 -	768	-	21.74	) @ Days Wages.

Tons to Mill:- 46 Tons

Wages Paid:- £9: 7: 6.

Cost per Cu.M.:- 8/7.

---

**NENTSBURY MINE & FLOOR  
SEPTEMBER 1938**

**REMARKS RE: MINE & MILL**

NENTSBURY MINE. The number of days worked was 26.  
The Tonnage mined and milled was 1222 Tons. Galena Concentrates produced amounted to 82.75 Tons, the recovery being 6.77%. Blende Concentrates produce amounted to 5.32 Tons, the recovery being 0.43%.

I indicated in the August report that the outlook for September was similar to the report for August. I have to report that the outlook for October appears much the same.

DEVELOPMENT. None done.

HEADINGS. The output indicates little change.

POTTERS ORE. There has been an improvement in the sale of Potters Ore, mainly to Antwerp, Messrs. Morris Ashby Ltd. Have also bought parcels of 2.5 and 5 Tons.

WITHERITE. The sample of concentrated Zinciferous product separated from the sample of Middlings sent to Messrs. Athole G. Allen Ltd., was sent to Belgium on October 4<sup>th</sup>. The analysis of this product is more like what I anticipated it should be. The first analysis sent contained no lead. I regarded this as almost impossible, and told Messrs. Athole G. Allen Ltd., both by phone and letter that I could not understand it. The analysis just received, a copy of which was sent with the sample to Belgium, gives Lead as Pbs – 7.32%. Zinc as Zn. S, in the first analysis is 54.5%, but in the second it is reported as 65.81% ZnS. This seems to be a much better product. Until Head Office report on the sample sent, I can make little or no comment. If the product is of value to the Company, it seems that some arrangement could be made with Messrs. Athole G. Allen Ltd., to produce a concentrate to contain the Lead and Zinc in whatever amount there may be in the Middlings sent for treatment. These will vary considerably from parcel to parcel.

If the other constituents are not objectionable it seems that the concentrate, including Witherite, should be worth from 40s/- to 60s/- per ton, and possibly more. The report from Head Office is awaited with interest.

GRAVEL SALES. The sales of Stone and Gravel have been maintained. As winter approaches these will probably be less.

MILL. This is in good order.

GENERAL REMARKS. I can add nothing more than I have reported by letter or in past Reports, and in the Budget for 1939, submitted about a week ago.

RODDERUP MINE - SEPTEMBER 1938.

DEVELOPMENT FOOTAGE - N I L.

CENTRAL FLATS.

SOUTH SIDE.

Len. Boll & Partner.

60 Days Worked.

L.	W.	S.F.	S.M.	H.	C.F.	C.M.	
17.5 x 22	-	385	-	35.76 x 12	-	4620	- 130.81 ) 32 fat. 1ft @ 32/-.

Tons to Mill:- 248 Tons.

Total Money £51: 9: 4.

Explosives 10: 1: 10.

£41: 7: 6.

Cost per Cu.M.:- 6/4.

NORTH SIDE.

W. Varty & Partner.

52 Days Worked.

L.	W.	S.F.	S.M.	H.	C.F.	C.M.	
5.5 x 11	-	60.5	-	5.57 x 7.5	-	454	- 12.86 )
16.0 x 15.5	-	248.0	-	23.03 x 7.0	-	1736	- 42.16 ) 15 fat. 1 ft.
						2190	- 62.02 ) @ 30/-

Tons to Mill:- 117 Tons.

Total Money £22: 15: 0.

Explosives 2: 3: 4.

£20: 11: 8.

Cost per Cu.M.:- 6/7.

G.Hind & Partners.

77 Days Worked.

L.	W.	S.F.	S.M.	H.	C.F.	C.M.	
19.5 x 22.5	-	438.75	-	40.69 x 8	-	3512	- 99.44 )
17.0 x 16.0	-	272.00	-	25.26 x 8	-	2176	- 61.61 ) 39 fat. 3 ft.
						5688	- 161.05 ) @ 33/6.

Tons to Mill:- 305 Tons.

Total Money £66: 3: 3.

Explosives 14: 1: 8.

£52: 1: 7.

Cost per Cu.M.:- 6/6.

J.Dalkin & Partner.

52 Days Worked.

L.	W.	S.F.	S.M.	H.	C.F.	C.M.	
12.5 x 36.5	-	456.25	-	42.360 x 4.5	-	2053	- 58.13 )
12.5 x 6.0	-	75.00	-	6.960 x 4.5	-	337	- 9.53 ) @ Days Wages.
						2390	- 67.66 )

Tons to Mill:- 127 Tons.

Wages Paid:- £22: 10: 8.

Cost per Cu.M.:- 6/8.

RODDERUP MINE (CONTINUED)

9

T. Jackson & Partners.

70 Days Worked.

L.	W.	S.F.	S.M.	H.	C.F.	C.M.	)
21.5	x 20	= 430	- 39.94	x 10	= 4300	- 121.755	) @ 29 Fat. 5 ft @ 30/6.

Tons to Mill:- 220 Tons.

Total Money £15: 9: 11.

Explosives 9: 17: 6.

£35: 12: 5.

Cost per Cu.M.:- 5/10.

F. Benwick & Partner.

44 Days Worked.

L.	W.	S.F.	S.M.	H.	C.F.	C.M.	)
22.5	x 34.5	= 776	- 72.09	x 5	= 3880	- 109.85	) @ Days Wages.

Tons to Mill:- 207 Tons.

Wages Paid £25: 2: 4.

Cost per Cu.M.:- 4/7.

P. Thompson & Partner.

76 Days Worked.

L.	W.	S.F.	S.M.	H.	C.F.	C.M.	)
20.5	x 25	= 512.5	- 47.56	x 8	= 4100	- 116.09	) 28 Fat. 3 ft @ 30/-

Tons to Mill:- 220 Tons

Total Money £42: 15: 0.

Explosives 9: 0: 8.

£33: 14: 4.

Cost per Cu.M.:- 5/10.

J.W. Robson & Partner.

47 Days Worked.

L.	W.	S.F.	S.M.	H.	C.F.	C.M.	)
12	x 25.5	= 306	- 28.42	x 4.5	= 1377	- 38.99	)
8	x 7.0	= 56	- 5.20	x 5.0	= 280	- 7.92	) @ Days Wages.

1657 - 46.91

Tons to Mill:- 87 Tons

Wages Paid £21: 10: 10.

Cost per Cu.M.:- 9/2.

D. Dickinson

8 Days Worked.

L.	W.	S.F.	S.M.	H.	C.F.	C.M.	)
6	x 14	= 84	- 7.80	x 10.5	= 882	- 24.97	) 6 fat. 1 ft. @ 30/-

Tons to Mill:- 47 Tons

Total Money £9: 5: 0.

Explosives -: 6: 10.

£8: 18: 2.

Cost per Cu.M.:- 7/1

C. Grant & Partner.

25 Days Worked.

L.	W.	S.F.	S.M.	H.	C.F.	C.M.	)
6	x 22	= 132	- 12.27	x 7	= 924	- 26.16	) @ Days Wages

Tons to Mill:- 50 Tons

Wages Paid:- £16: 2: 11.

Cost per Cu.M.:- 12/4.



RODDERUP MINE (CONTINUED)							10
CENTRAL FLATS EAST.							
Wm. Watson & Partners.						25 Days Worked.	
L.	W.	S.F.	S.M.	H.	C.F.	C.M.	
11 x 20	-	220	-	20.44 x 15.5	-	3410	- 96.55 )
6 x 6	-	36	-	3.34 x 6.0	-	216	- 6.11 )
13 x 21	-	273	-	25.36 x 12.0	-	3276	- 92.76 )
						6902	- 195.42 )
Tons to Mill:- 368.							
Total Money	£80:	8:	0.				
Explosives	17:	4:	11.				
£63: 3: 8.							Cost per Cu.M.:- 6/6.

### RODDERUP MINE & MILL SEPTEMBER 1938

MINE. The number of days worked was 26.

The Tonnage mined was 1954 Tons, and the Tonnage crushed 1996 Tons. Concentrates produced amounted to 132.55 Tons. The percentage recovered was 6.64%.

During September there was little variation in the quantity of Galena in the Flats worked. The recovery 6.64% is slightly better than in August when the recovery was 6.46, Those slight variations will occur and nothing we can do will prevent it. It will be remembered that early this year, the value of the ore in the Flats in the Eastern area dropped so low that we removed most of the miners to the West Central Flats and kept only three miners employed in the East End. It is pleasing to be able to state that we now have four miners working in the East End, and the value is as good as anything we have in the Mine. This indicates how difficult it is to make a definite statement respecting a block of ground not Developed.

Last month the results of the Flats worked on a low height were so unsatisfactory generally, and particularly in the case of one pair of miners, that we decided to stop this particular place and dispense with the miners services. Those miners referred to were C. Grant and R. Walton. We carried on in two places in the same heights, as it seemed advantageous to do so, but any system can only be regarded as temporary and must be adjusted to circumstances. The Flat, south of the Incline, continues to yield Ore of average grade. This, although anticipated, is satisfactory.

At the end of the month there was no appreciable change in the values throughout the mine, and if there is no change during October the output should be maintained.

MILL. In good order.

Month of September 1938.

Name of Mine		Previous Month's A.R.		Colony Values		B. & B. Remaining		B. & B. Values		Previous Month's A.R.		B. & B. Remaining		Previous Month's A.R.		B. & B. Remaining	
		bu ft	tons	bu ft	tons	bu ft	tons	bu ft	tons	bu ft	tons	bu ft	tons	bu ft	tons	bu ft	tons
M. & M. Mine	1680	93	1,092.2	607	8242	514											
	4068	226	682.74	3795	64206	3567											
	4176	232															
	6890	366															
M. & M. Mine			904212	50234	904212	50234	904212	50234	904212	50234	904212	50234	904212	50234	904212	50234	50234
		164	47550	2641	44596	2477	47550	2641	44596	2477	47550	2641	44596	2477	47550	2641	44596
			41940	2330	41940	2330	41940	2330	41940	2330	41940	2330	41940	2330	41940	2330	41940
	468	43	379086	21061	375318	21018	379086	21061	375318	21018	379086	21061	375318	21018	379086	21061	375318
M. & M. Mine	20236	1124	1451984	80666	1442814	80140	1472727	80666	1442814	80140	1472727	80666	1442814	80140	1472727	80666	1442814

Longage:- nil

Development:- nil

Name of Vessel	Galena Values		Galena Value		Galena Value		Galena Value		Galena Value	
	Cu. ft	Tons	% Galena	Tons	Cu. ft	Tons	% Galena	Tons	Cu. ft	Tons
Expedit Vessel	9242	314	5	26						
Don V. S. S. S.	64206	3567	5	178						
Donay Vessel	...	...	...	...						
Lavard Vessel	...	...	...	...						
1 <sup>st</sup> Don Vessel	904212	50234	5	2511	904212	50234	10	5023	904212	50234
2 <sup>nd</sup> Don Vessel	44596	2477	6	149	44596	2477	15	371		
3 <sup>rd</sup> Don Vessel	41940	2330	6	140	41940	2330	8	186		
4 <sup>th</sup> Don Vessel	378318	21018	5	1051	378318	21018	8	1681	378318	21018
5 <sup>th</sup> Don Vessel	442814	801405	5	4058	442814	801405	95	4261	442814	801405

[illegible]

2/8	5901	2/6	845
1/8	606	3/6	909
2/8	606	1/6	429
4/3	888	1/6	665
1/8	3001	2/6	666
1/4	6101	1/8	699
1/4	8081	2/8	099
2/3	4681	2/6	889
2/4	92211	2/8	455

September	8	6/2
	9	6/4
		6/8

## Report on the Nenthead Mines October 1938

### REPORT ON THE NENTHEAD MINES.

OCTOBER 1938.  
 @@@@@@@@@@@@@@@@@@@@@@@@@@@@@@

	<u>Nentsbury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Totals.</u>
Ore Mined.	1282 Tons	One Steam Engine ran	1827 Tons	3109 Tons.
Ore Milled	1282 "	6 hours	1827 "	3109 " .
Lead Concs. produced	85.5 "	daily. One Fuel Oil Engine ran	122.95 "	208.45 "
% of Galena	6.66%	9 hours daily.	6.73%	6.66% 6.73%
Blende prd.	Nil.		Nil.	Nil.
% of Blende	Nil.		Nil.	Nil.
Hours Worked	326 hrs.		324 hrs.	326 334
Tons per Hour	3.93 Tons.		5.47 Tons	3.93 5.47

### S T O C K S .

	<u>N'bury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Wellhope.</u>	<u>Totals.</u>
Crude Ore	Nil.	Nil.	Nil.	2300 Tons	2300 Tons.
Blende-With-erite.	1125 Tons.	250 Tons.	150 Tons.	Nil.	1525 Tons.

Rough Blende - Nil.  
Fine Blende - Nil.

Galena at N'bury, 46.25 Tons. Potters Ore at N'bury, 52.487 Tons.  
 Galena at Rodderup, 46.60 " . Potters Ore at Rodderup, 85.830 Tons.

Coal Consumed at Rampgill,	13.35 Tons
Fuel Oil, " " "	5.50 "
" " " " Nentsbury,	3.00 "
" " " " Rodderup,	1.00 "

COMPRESSED AIR produced at Nenthead and Wellhope, 1000 Cubic Feet per minute. Pressure at face in mine, 80 lbs. per sq. inch.  
 COMPRESSED AIR produced at Rodderup, 1200 Cubic Feet per minute.  
 Pressure at face in mine, 80 to 85 lbs. per sq. inch.

Cubic Feet per Ton - 12.

See Remarks

Sheet No. 13.

Book of Orders 1882.

No. of Ton	Balance		Previous Month's B.R.		B.R. Remaining		Previous Month's B.R.		B.R. Remaining		Previous Month's B.R.		B.R. Remaining	
	bu. ft	tons	bu. ft	tons	bu. ft	tons	bu. ft	tons	bu. ft	tons	bu. ft	tons	bu. ft	tons
1st Ton	1420	107	8248	514	7322	407								
2nd Ton	4358	242	64206	3567	59848	3328								
3rd Ton	4960	278												
4th Ton	7606	488												
5th Ton			904212	50234	904212	50234	904212	50234	904212	50234	904212	50234	904212	50234
6th Ton	4392	242	44596	2477	2224	2224	44596	2477	2224	2224	44596	2477	2224	2224
7th Ton			41940	2330	41940	2330	41940	2330	41940	2330	41940	2330	41940	2330
8th Ton			278212	21018	278212	21018	278212	21018	278212	21018	278212	21018	278212	21018
9th Ton	23241	1293	442514	80140	442514	80140	442514	80140	442514	80140	442514	80140	442514	80140

Name of Ton	Balance		Previous Month's B.R.		B.R. Remaining		Previous Month's B.R.		B.R. Remaining		Previous Month's B.R.		B.R. Remaining	
	bu. ft	tons	bu. ft	tons	bu. ft	tons	bu. ft	tons	bu. ft	tons	bu. ft	tons	bu. ft	tons
10th Ton	7322	407												
11th Ton	59848	3328												
12th Ton														
13th Ton	904212	50234												
14th Ton	442514	80140												
15th Ton	41940	2330												
16th Ton	278212	21018												
17th Ton	442514	80140												
18th Ton	442514	80140												



NENTSBURY LANE (Continued)

"S.2" VEIN STRING S. OF "S.2" GO-ING E. IN MIDDLE FLAT. 2" GALENA.

W. Liverick & Partner. 52 Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
Drive 38 x 9 = 342 - 31.77 x 6 = 2052 - 58.10 ) 52 Days Wages.

Tonnage to Mill:- 120.

Wages Paid:- £20. 16. 0. Cost per Cu.M.:- 7s/2d.

D. VEIN BETWEEN H.R. & S.1.V. IN TOP FLAT. 1.5" GALENA.

T. Hudspeth & Partner. 51 Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
32 x 10 = 320 - 29.73 x 6 = 1920 - 54.35 ) 51 Days Wages.

Tonnage to Mill:- 101.

Wages Paid:- £20. 8. 0. Cost per Cu.M.:- 7s/6d.

COX VEIN STRING N. OF H. RAISE IN TOP FLAT. 2" GALENA.

M. Short & Partner. 46½ Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
25 x 15 = 375 - 34.84 x 7 = 2625 - 74.32 ) 46 Days Wages.

Tonnage to Mill:- 154.

Wages Paid:- £18. 14. 0. Cost per Cu.M.:- 5s/-.

COX VEIN NORTH OF "T" VEIN IN TOP FLAT. 1.5" GALENA.

E. Graham & Partner. 60½ Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
24 x 12 = 288 - 26.75 x 6 = 1728 - 48.93 ) 60 Days Wages.

Tonnage to Mill:- 92

Wages Paid:- £19. 15. 7. Cost per Cu.M.:- 8s/1d.

ST. VEIN STRING NORTH IN TOP FLAT. 2" GALENA.

H. Kibbly & Partner. 52 Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
Drive 18 x 18 = 324 - 30.10 x 6 = 1944 - 55.03 ) 52 Days Wages.

Tonnage to Mill:- 118.

Wages Paid:- £20. 16. 0. Cost per Cu.M.:- 7s/7d.

ST. VEIN STRING SOUTH OF "T" VEIN IN LOW FLAT. 2" GALENA.

G. Stent & Partner 52 Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
29 x 13 = 377 - 35.02 x 8 = 3016 - 85.39 ) 52 Days Wages.

Tonnage to Mill:- 180.

Wages Paid:- £20. 16. 0. Cost per Cu.M.:- 4s/11d.

## **NENTSBURY MINE & FLOOR OCTOBER 1938**

NENTSBURY MINE. The number of days worked was 96. The tonnage milled and mined was 1282 Tons. Galena concentrates produced amounted to 85.5 Tons. The recovery was 6.66%. No Blende concentrates were produced. There is little change in the value of the ore mined. The quantity mined was 60 Tons more than in September, and the output of concentrated 2.75 Tons more. The grade of ore mined was 0.11% lower. The outlook for November is similar.

DEVELOPMENT. None done, except the drives on Strings, which drives are actually Development Drives for the opening up of small bodies of ore not previously opened up by development. It is difficult to assess the quantities of ore opened up by these small drives and consequently we do not regard them as development.

HEADINGS. No appreciable change

MIXED ORE. The question of milling a parcel of Mixed Ore in Nentsbury Mill, as an experiment, was discussed fully with Mons. Chaplain, both in the mine, in the office, and with Messrs. Athole G. Allen and Dr Tyrer at Stockton. The conclusion we came to was That an experiment should be made of a parcel of Mixed Ore, say 300-400 Tons by milling the ore in Nentsbury Mill, extracting there from as much Galena concentrates as possible, after which the Middlings should be sent to Messrs. Athole G. Allen Ltd., at Stockton. The parcel of Middlings should be carefully weighed and sampled. Messrs Allen Ltd. Would treat the parcel, and pay the V.M. Co., 1<sup>st</sup>, for the Witherite content, and 2<sup>nd</sup>, hand to the V.M. Co. the Zinciferous product after extracting the BaCO<sub>3</sub> content. Messrs. Athole Allen and Dr Tyrer told Messrs. Treloar and Chaplain that they would buy the Middlings if reasonably free from CaCO<sub>3</sub>, even if the BaCO<sub>3</sub> content was as low as 40% and the Zinc content as high as 30%. They also considered it might be possible to separate the Galena from the Blende after extracting the BaCO<sub>3</sub>. They are also prepared to purchase the Middlings now in stock, at Nentsbury, if the CaCO<sub>3</sub> content is not high. They agreed with Messrs Chaplain & Treloar, that an experiment of a bulk parcel of Middlings produced from ore broken in the mine should be made, and upon the result obtained, both they and us could arrive at a decision. I consider it decidedly in the interest of the V.M. Co. to agree to an experiment being made. If Head Office agree quickly, it should be possible to know the result of this experiment before the end of 1938.

POTTERS ORE. Sales of Potters Ore were normal.

GRAVEL SALES. These have fallen off slightly during October owing to the very wet weather. We have however orders to be delivered for about 600 Tons, which will be delivered as soon as the contractors can take delivery.

MILL. In good order.



RODDERUP FELL MINE.

OCTOBER 1958.

CENTRAL FLATS SOUTH SIDE OF VEIN.

L. Bell & Partners. 72 Days Worked.  
L W S.F. S.M. H. C.F. C.M. )  
20 x 24 - 480 - 44.59 x 12 - 5760 - 163.08 ) @ 40 Fat. @ 33/6.

Tonnage to Mill:- 280.

Total Money £67. 0. 0.  
Explosives 12. 11. 0.

£54. 9. 0.

Cost per Cu.M.:- 6s/8d.

G. Hind & Partners. 67 Days Worked.  
L W S.F. S.M. H. C.F. C.M. )  
26 x 13 - 338 - 31.40 x 14 - 4732 - 133.98 ) @ 32 Fat. 5 ft. @ 32/-

Tonnage to Mill:- 230.

Total Money £52. 10. 8.  
Explosives 13. 18. 8.

£38. 12. 0.

Cost per Cu.M.:- 5s/9d.

CENTRAL FLATS NORTH SIDE OF VEIN.

W. Varty & Partners. 50 Days Worked.  
L W S.F. S.M. H. C.F. C.M. )  
14.5 x 28 - 406 - 37.71 x 8 - 3248 - 91.96 ) @ 22 Fat 3 ft @ 31/6

Tonnage to Mill:- 158

Total Money £35. 8. 9.  
Explosives 5. 9. 8.

£29. 19. 1.

Cost per Cu.M.:- 6s/6d.

R. Clarke & Partner. 29 Days Worked.  
L W S.F. S.M. H. C.F. C.M. )  
10.5 x 22 - 231 - 21.46 x 8.5 - 1963 - 55.58 ) @ 13 Fat 4 ft. @ 32/-

Tonnage to Mill:- 96

Total Money £21. 17. 4.  
Explosives 5. 4. 0.

£16. 13. 4.

Cost per Cu.M.:- 6s/-.

I. Jackson & Partners. 67 Days Worked.  
L W S.F. S.M. H. C.F. C.M. )  
17 x 28 - 476 - 44.22 x 10 - 4760 - 134.77 ) @ 33 Fat. @ 32/6.

Tonnage to Mill:- 232

Total Money £53. 12. 6.  
Explosives 10. 0. 6.

£43. 12. 0.

Cost per Cu.M.:- 6s/6d.

RODDERUP FELL MINE (Continued).

J. Balkin & Partners. 51 Days Worked.  

L	W	S.F.	S.M.	H.	C.F.	C.M.	
16 x 25	-	400	-	37.16 x 8.5	-	3400	- 96.27
3 x 6	-	18	-	1.67 x 10	-	180	- 5.09
						3580	- 101.36

 } @ 24 Fat 5 ft @ 32/6.

Tonnage to Mill:- 174

Total Money £40. 7. 1.  
 Explosives 7. 15. 0.  
£32. 12. 1. Cost per Cu.M.:- 6s/5d.

F. Renwick & Partner. 44 & 8 Days Worked.  

L	W	S.F.	S.M.	H.	C.F.	C.M.	
9.5 x 23.5	-	223.25	-	20.71 x 9.75	-	2177	- 61.64
2 x 34.5	-	69.00	-	6.41 x 3.00	-	207	- 3.85
						2384	- 67.49

 } 15 Fat. 1ft @ 30/-  
 } 8 Days Wages

Tonnage to Mill:- 116

Total Money £22. 15. 0.  
 Explosives 4. 14. 8.  
£18. 0. 4.  
 plus 8 days @ 8/24 3. 5. 6.  
£21. 5. 10. Cost per Cu.M.:- 6s/4d.

P. Thompson & Partners. 69 Days Worked.  

L	W	S.F.	S.M.	H.	C.F.	C.M.	
6.5 x 12	-	78	-	7.24 x 8	-	624	- 17.67
13.5 x 25	-	337.5	-	31.40 x 8	-	2700	- 76.45
						3324	- 94.12

 } @ Days Wages

Tonnage to Mill:- 162

Wages Paid :- £29. 6. 6. Cost per Cu.M.:- 6/2

J. Robson & Partner. 48 Days Worked.  

L	W	S.F.	S.M.	H.	C.F.	C.M.	
4 x 19.0	-	76.00	-	7.06 x 4.5	-	342	- 9.67
2.5 x 25.5	-	63.75	-	5.94 x 4.5	-	286	- 8.09
12 x 15.0	-	82.50	-	7.71 x 12.0	-	990	- 28.02
5.5/						1618	- 45.78

 } @ Days Wages

Tonnage to Mill:- 79

Wages Paid :- £22. 0. 0. Cost per Cu.M.:- 9s/7d.

CENTRAL FLATS EAST SECTION.

W. Watson & Partners. 91 Days Worked.  

L	W	S.F.	S.M.	H.	C.F.	C.M.	
13 x 23	-	299	-	27.77 x 12	-	3588	- 101.59
9.5 x 17	-	161.5	-	15.05 x 16	-	2580	- 73.16
						6172	- 174.75

 } @ 40 fat @ 32/6.

Tonnage to Mill:- 300

Total Money £67. 0. 0.  
 Explosives 12. 11. 0.  
£54. 9. 0. Cost per Cu.M.:- 6s/3d.

**RODDERUP MINE & MILL  
OCTOBER 1938**

MINE. The number of days worked was 26.

The Tonnage mined was 1827 Tons, v 1954 in September. The difference was 127 tons less. The lower tonnage was accounted for by the excessive rainfall which prevented some of the miners coming to work, and the horses from drawing in the level. On several days, the water in the level was over 2 feet in depth.

Concentrates produced amounted to 122.95 tons, as compared with 132.55 Tons in September. The percentage recovery was 6.73% compared with 6.64% in September. If weather conditions are favourable, the outlook for November should show an improvement over October.

Considering that Ore in Flats vary from week to week, the outlook at present can be regarded as favourable. There were indications at the end of October, that the ore in the East End Area Flat, and Two Flats in the Central Section, would in all probability yield slightly richer ore than in October. It is however very difficult to prophesy with a close degree of accuracy what the value will be four weeks in advance.

Last month a Junior Mill Foreman left our employ, and on the 24<sup>th</sup> October, our Mill-Fitter and Assistant Mill-Foreman gave notice to terminated his employment. He has since left. The reason for their leaving was the rate of wage paid. I do not know where the former is working. The latter obtained employment at a Barytes mine in Middleton-in-Teesdale, where the rate of wage paid is much above our rate. At present the labour question is a difficult one. Possibly there will be an improvement in Alston Moor after the end of 1938 when work for the Council will be completed.

MILL. In good order.



# Report on Nenthead Mines November 1938

## REPORT ON NENTHEAD MINES

NOVEMBER 1938.

	<u>Nentsbry.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Totals.</u>
Ore Mined.	1290 Tons	One Steam Engine ran about 6 hours daily	1936 Tons	3226 Tons.
Ore Milled	1290 "	One Fuel Oil Engine ran 9 hrs. daily.	1936 "	3226 "
Lead Concs. produced	87.25 "		125.05 "	N. 212.30 "
% of Concs.	6.76%		6.46%	N. 6.76% R. 6.46%
Blende concs.	Nil.		Nil.	Nil.
% of Blende	Nil.		Nil.	Nil.
Hours worked	331 hours.		350 hours.	N. 331. R. 350.hours.
Tons per hour	3.89 Tons.		5.53 Tons	3.89 5.53 Tons.

### STOCKS.

	<u>N'bury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Wellhope.</u>	<u>Total.</u>
Crude Ore	Nil.	Nil.	Nil.	2300 Tons.	2300 Tons.
Blende-					
Witherite	1125 Tons	250 Tons.	150 Tons.	Nil.	1525 Tons.

Rough Blende - NIL.  
Fine " - NIL.

Galena at Nentsbury, 23.95 Tons. Potters Ore at Nentsbury, 65.04 Tons.  
Galena at Rodderup 19.55 Tons. Potters Ore at Rodderup, 88.352 " .

Coal	consumed at Rampgill	13 Tons.
Fuel Oil	" " "	6 "
"	" " Nentsbury	3.25 Tons.
"	" " Rodderup	1.00 " .

COMPRESSED AIR produced at Nentsbury and Wellhope, 1000 cubic feet per minute. Pressure at the face underground 80 lbs. per square inch.

COMPRESSED AIR produced at Rodderup 1200 cubic feet per minute. Pressure at face in the mine 80 to 85 lbs per square inch.

Month of November 1932									
Galena Values					Blonde Values				
Previous Month A.R.		A.R. Remaining		A.R.	Previous Month A.R.		A.R. Remaining		A.R.
bu. ft.	lbs.	bu. ft.	lbs.		bu. ft.	lbs.	bu. ft.	lbs.	
167	3000	407	4322	240					
177	3180	598.53	566.73	31.43					
283	5042								
381	6852								
185	2254	9042.12	9019.58	50109	9042.12	9019.58	50109	9042.12	50234 8014.2
213	3840	40204	36364	2020	40204	36364	2020	36364	2020
-	-	41940	41940	2330	41940	41940	2330	41940	2330
-	-	378318	378318	21013	378318	378318	21013	378318	21013 378318
24218	1346	4431849	795471495.75	795471495.75	443184674	795471495.75	795471495.75	1282520	712521080270

Galena Values					Blonde Values				
Previous Month A.R.		A.R. Remaining		A.R.	Previous Month A.R.		A.R. Remaining		A.R.
bu. ft.	lbs.	bu. ft.	lbs.		bu. ft.	lbs.	bu. ft.	lbs.	
4322	8405								
56673	31485								
901958	501095				901958	501095	501095	501095	501095
36364	20206				36364	20206	20206	20206	20206
41940	23306				41940	23306	23306	23306	23306
378318	21013				378318	21013	21013	21013	21013
443184674	795471495.75				443184674	795471495.75	795471495.75	795471495.75	795471495.75

Galena Values					Blonde Values				
Previous Month A.R.		A.R. Remaining		A.R.	Previous Month A.R.		A.R. Remaining		A.R.
bu. ft.	lbs.	bu. ft.	lbs.		bu. ft.	lbs.	bu. ft.	lbs.	
4322	8405								
56673	31485								
901958	501095				901958	501095	501095	501095	501095
36364	20206				36364	20206	20206	20206	20206
41940	23306				41940	23306	23306	23306	23306
378318	21013				378318	21013	21013	21013	21013
443184674	795471495.75				443184674	795471495.75	795471495.75	795471495.75	795471495.75



NENTSBURY MINE

NOVEMBER 1930

DEVELOPMENT FOOTAGE :- NIL.

CALCULATED INCHES OF GALENA :- 1.98

L.V. EAST PORTION STH. of S.2 IN TOP FLAT. 1.5" GALENA.

Geo. Short & Partner. 53 Days Worked.  
L H S.F. S.M. W. C.F. C.M. )  
17 x 7 - 119 - 11.06 x 6 - 714 - 20.21 )  
24 x 11 - 264 - 24.52 x 6 - 1531 - 44.85 ) 6 Days Wages  
2298 - 65.06 )

Tonnage to Mill:- 101

Wages Paid:- £21. 4. 0. Cost per Cu.M.:- 6/6.

L. VEIN WEST PORTION S. of S.2 IN TOP FLAT. 2.5" GALENA.

Geo. Moffatt & Partner. 48 Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
Headings 21 x 20 - 420 - 39.02 x 6 - 2520 - 71.34 ) 6 Days wages.

Tonnage to Mill:- 189

Wages Paid:- £19. 4. 0. Cost per Cu.M.:- 5/5.

L. V. STRING BETWEEN HIGH RAISE AND SY.V. IN TOP FLAT. 1" GALENA.

Lance. Liverick 14 Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
13 x 7 - 91 - 8.45 x 6 - 546 - 15.46 ) 6 Days Wages

Tonnage to Mill:- 24

Wages Paid:- £5. 12. 0. Cost per Cu.M.:- 7/3.

L.V. ~~STRING~~ EAST OF L.V. IN MIDDLE FLAT. 2.5" GALENA

J.J. Walton & Partner 54 Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
Drive 31 x 8 - 248 - 23.04 x 6 - 1488 - 42.13 ) 6 Days Wages

Tonnage to Mill:- 105

Wages Paid:- £21. 12. 0. Cost per Cu.M.:- 10/3

S.2 V. STRING S. OF S.2 V. EAST IN MIDDLE FLAT. 2" GALENA.

W. Liverick & Partner 53 Days Worked  
L H S.F. S.M. W C.F. C.M. )  
Drive 40 x 8 - 320 - 29.73 x 6 - 1920 - 54.36 ) 6 Days Wages

Tonnage to Mill:- 113

Wages Paid:- £21. 4. 0. Cost per Cu.M.:- 7/9.



NENTSBURY MINE - NOVEMBER 1939.

S.2 V. STRING S. OF S.2 (WEST) IN MIDDLE FLAT 2" GALENA.

Thos. Richardson & Partner. 41 $\frac{1}{2}$  Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
40 x 6 - 320 - 29.73 x 6 - 1920 - 54.36 ) @ Days Wages

Tonnage to Mill:- 113

Wages Paid:- £16. 14. 0. Cost per Cu.M.:- 6/2.

DUPONT VEIN BETWEEN H. RAISE & S1. IN TOP FLAT. 2" GALENA.

T.S. Hudspeth & Partner. 45 Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
Heading 50 x 10 - 500 - 46.44 x 6 - 3000 - 84.94 ) @ Days Wages

Tonnage to Mill:- 171

Wages Paid:- £18. 0. 0. Cost per Cu.M.:- 4/3

COX VEIN STRING N. OF H. RAISE IN TOP FLAT. 2.5" GALENA.

M. Short & Partner. 43 $\frac{3}{4}$  Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
Heading 20 x 15 - 300 - 27.87 x 7 - 2100 - 59.46 ) @ Days Wages

Tonnage to Mill:- 148

Wages Paid:- £17. 10. 0. Cost per Cu.M.:- 5/11.

COX VEIN STRING N. OF T. VEIN IN TOP FLAT. 1" GALENA.

J. Liverick & XXXX 24 Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
18 x 10 - 180 - 16.73 x 6 - 1080 - 30.57 ) @ Days Wages

Tonnage to Mill:- 39

Wages Paid:- £8. 5. 0. Cost per Cu.M.:- 5/4

SINCAV V. STRING N. OF T. VEIN IN TOP FLAT. 2" GALENA.

H. Kielty & Partner. 53 Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
Drive 27 x 18 - 486 - 45.14 x 6 - 2916 - 82.56 ) @ Days Wages

Tonnage to Mill:- 169

Wages Paid:- £21. 4. 0. Cost per Cu.M.:- 5/1.

SINCAV V. STRING S. OF T. VEIN IN TOP FLAT. 2" GALENA.

C. Stout & Partner. 51 Days Worked  
L H S.F. S.M. W C.F. C.M. )  
Heading 14 x 13 - 182 - 16.91 x 8 - 1456 - 41.22 )  
Stops 12 x 10 - 120 - 11.15 x 6 - 720 - 20.38 ) @ Days Wages  
2176 - 61.60

Tonnage to Mill:- 129

Wages Paid:- £20. 8. 0. Cost per Cu.M.:- 6/7.

NENTSBURY MINE - NOVEMBER 1938

WITHERITE. Si V. EAST.

46 Days Worked.

	L	H	S.F.	S.M.	W	C.F.	C.M.	)
T. Richardson	10 x	4 -	40 -	3.71 x	10 -	400 -	11.32	)
L. Liverick	9 x	8 -	72 -	6.69 x	8 -	576 -	16.31	)
R. Colling	7 x	10 -	70 -	6.50 x	9 -	630 -	17.81	)
T.E. Hudspeth	9 x	9 -	81 -	7.52 x	8 -	648 -	18.35	)
						<u>2254</u> -	<u>63.82</u>	)

Days  
Wages

Wages Paid:- 218. 8. 0.

Cost per Cu.M.:- 5/9.

## **NENTSBURY MINE & MILL NOVEMBER 1938**

NENTSBURY MINE. The working days for November were 27.

The tonnage Mine and Milled was 1290 Tons. Galena concentrates produced amounted to 87.25 Tons. The percentage recovery was 6.76%. There was also broken, but not extracted about 100 Tons of Mixed ore. There is very little difference in the grade of ore milled in November compared with October. The outlook at the end of November was unchanged.

DEVELOPMENT. Very little change.

MIXED ORE. Head Office decided to carry out the experiment referred to in last months' report, and information to prepare for this test was received on November 12<sup>th</sup>. We immediately commenced preparations for the test, both in the mill and underground, but 16 days elapsed before our preparations were completed, consequently we were not able to carry out the test in November. It will be carried out in the week commencing Nov. 28<sup>th</sup> (This Test was carried out from the 29<sup>th</sup> November to Dec. 3<sup>rd</sup> – A.T.) As reported last month, the result of this test depends upon the value of the Middling concentrate, and the price Messrs. Athole Allen will offer for it, and how much Zinc they can recover in the form of a 50% Zinc Concentrate, and whether they can separate the Zinc from the Lead. If the separation is satisfactory and the price remunerative, by mining 1000 Tons or more, of Lead ore monthly, and about 600 Tons of Mixed ore monthly, the loss at Nentsbury should be considerably reduced. I would therefore urge that this should be done. Estimates and calculations are very important and necessary, but with no data re: the Mixed Ores it seems that nothing but a 3 months' or so test during which 100 Tons about of Lead Ore and 500-600 Tons of Mixed Ores, sufficient to give Messrs. Allen Ltd all the Witherite they require, should be mined and milled. These results will prove whether the mine worked by this method will pay, or considerably reduce the loss. I see no immediate hope for Nentsbury unless by these trials.

POTTERS ORE. Sales of Potters Ore have fallen off somewhat possibly owing to the falling price of Lead.

GRAVEL SALES. We have orders but owing to the wet weather which has been more or less continuous for two months, the contractors are unable to take delivery.

MILL. In good order.

# RODDERUP FELL MINE

NOVEMBER 1938.

H. 50. T. Bushby & Partners. 76 Days Worked.  
 L W S.F. S.M. H C.F. C.M. )  
 21½ x 21 - 451.5 - 41.94 x 10½ - 4740.75 - 134.23 ) 33 fat. @ 32/6.

Tons to Mill:- 204

Gross Earnings:- £53. 12. 6.  
 Explosives 12. 19. 6.

£40. 13. 0. Cost per Cu.M.:- 6/1.

G. Hind & Partners. 31 Days Worked.  
 L W S.F. S.M. H C.F. C.M. )  
 G. 48. 15 x 14 - 210 - 19.51 x 13 - 2730 - 77.30 ) 3 Days Wages  
 D. 41. 7 x 27½ - 192½ - 17.88 x 7½ - 134.14 - 40.87 )  
 D. 41. 6 x 5½ - 33 - 3.06 x 7½ - 22.7 - 7.00 )  
 4421 - 125.17 )

Tons to Mill:- 200

Wages Paid:- £36. 9. 0. Cost per Cu.M.:- 5/10.

C. 53. W. Varty & Partner. 54 Days Worked.  
 L W S.F. S.M. H C.F. C.M. )  
 14½ x 20 - 290 - 26.94 x 7½ - 21.75 - 61.58 ) 3 Days Wages

Tons to Mill:- 108.

Wages Paid:- £20. 5. 0. Cost per Cu.M.:- 6/7

B. 51. R. Clark & Partner. 53 Days Worked.  
 L W S.F. S.M. H C.F. C.M. )  
 16½ x 21 - 346.5 - 32.17 x 10 - 3465 - 98.11 ) 24 fat. @ 32/6

Tons to Mill:- 157

Gross Earnings £39. 0. 0.  
 Explosives 8. 15. 4.

£30. 4. 8. Cost per Cu.M.:- 6/2

D. 49 J. Dalken & Partner 54 Days Worked.  
 L W S.F. S.M. H C.F. C.M. )  
 2 x 25 - 50 - 4.64 x 8½ - 425 - 12.04 )  
 9 x 20½ - 184.5 - 17.14 x 6½ - 1199 - 33.96 ) 24 fat. 4 @  
 13 x 18½ - 240.5 - 22.33 x 8 - 1924 - 54.48 ) 32/6.  
 3548 - 100.48 )

Tons to Mill:- 168

Gross Earnings £40. 1. 8.  
 Explosives 9. 15. 0.

£30. 6. 8. Cost per Cu.M.:- 6/-

**RODDERUP MINE & MILL  
NOVEMBER 1938**

MINE. The number of working days in November was 27. The Tonnage Mined and Crushed was 1936 Tons. Concentrates produced amounted to 125.05 Tons. Both tonnage of Ore and tonnage of Concentrates were slightly higher than in October. The grade of ore mined fell from 6.73% to 6.46%. At the end of November, the value of the ore mined had fallen slightly, and the general outlook was not quite as good as at the end of October. The labour situation is unchanged. We have managed to secure what workmen we require, but some of the new men will have to be broken to the work, and they are not yet as valuable as the men we have lost.

MILL. In good order.



## Report on the Nenthead Mines December 1938

### REPORT ON THE NENTHEAD MINES 0000000000 000 0000 00000000000000 0000000000

DECEMBER 1938  
0000000000000000 00000000

	<u>Nentsbury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Totals.</u>
Ore Mined	1197 Tons.	One Steam Engine ran	1662 Tons.	2859.
Ore Milled	1197 "	6 to 8 hours daily. One Fuel Oil Engine 9 hrs daily.	1637 "	2834.
Lead Cons. prcd.	72.75 "		106.5 "	179.25
% of Concentrates	6.08%		6.5%	N. R. 6.08% 6.5%
Blende produced	Nil.		Nil.	Nil.
% of Blende	Nil.		Nil.	Nil.
Hours worked	309		315	N. R. 309 315
Tons per hour	3.87		5.2	N. R. 3.87 5.2

PLEASE NOTE:- Nentsbury tonnage of 1197 Tons is made up of 945 Tons of Lead Ore averaging 7.32% and 252 Tons of Mixed Ore averaging 1.39% Lead. There was also produced 112.97 Tons of Mixed Concentrates assaying on average 67.14% BaCO<sub>3</sub> and 14.15% Zn.

#### S T O C K S.

	<u>Nentsbury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Wellhope.</u>	<u>Totals.</u>
Crude Ore	Nil.	Nil.	25 Tons.	2300 Tons	2325 Tons
Blende-Witherite	1125 Tons	250 Tons	150 "	Nil.	1525 Tons.

In addition to the above there was delivered 112.97 Tons of Mixed Ore to Messrs. Athole G. Allen (Stockton) Ltd., Stockton-on-Tees.

Rough Blende - NIL  
Fine " - NIL

GALENA at Nentsbury 16.60 Tons, POTTERS ORE at Nentsbury, 50.30 Tons  
" " Rodderup 25.60 " , " " Rodderup, 61.50 "

Coal	consumed at Rampgill,	26.75 Tons.
Fuel Oil,	" " "	5.00 Tons.
" "	" Nentsbury,	3.00 Tons.
" "	" Rodderup,	2.50 Tons.

COMPRESSED AIR produced at Nenthead and Wellhope, 1000 cu.ft. per minute  
Pressure at Face underground, 80 lbs. per sq. inch.

COMPRESSED AIR produced at Rodderup, 1200 cu. ft. per minute.  
Pressure at Face in the Mine, 80 to 85 lbs. per sq. inch.



Books, Chart for Chn. - 19.

du. Recurs.

Chart No. 133.

Month of December 1938.

Name of Vessel		Before Chart		Month of December 1938		Chart Value		Without Value	
		bu. ft	Chn.	bu. ft	Chn.	bu. ft	Chn.	bu. ft	Chn.
Name of Vessel		bu. ft	Chn.	bu. ft	Chn.	bu. ft	Chn.	bu. ft	Chn.
1st Chn. Vessel	2448	136	184	104					
2nd Chn. Vessel	2520	140	54153	5008					
3rd Chn. Vessel	4260	237							
4th Chn. Vessel	6228	346							
5th Chn. Vessel	2388	138	901958	49977	901958	49977	901958	49977	901958
6th Chn. Vessel	3816	179	36364	1841	36364	1841	36364	1841	36364
7th Chn. Vessel			41940	2330	41940	2330	41940	2330	41940
8th Chn. Vessel			378318	81018	378318	81018	378318	81018	378318
9th Chn. Vessel	21054	1170	1419575	78278	1419575	78278	1419575	78278	1419575
Total									
Name of Vessel		bu. ft	Chn.	bu. ft	Chn.	bu. ft	Chn.	bu. ft	Chn.
1st Chn. Vessel	1874	100	5						
2nd Chn. Vessel	54153	5008	5						
3rd Chn. Vessel									
4th Chn. Vessel	899576	49977	5						
5th Chn. Vessel	33148	1841	5						
6th Chn. Vessel	41940	2330	5						
7th Chn. Vessel	378318	81018	5						
8th Chn. Vessel	1419575	78278	5						
9th Chn. Vessel									
Total									

N E N T S B U R Y    M I N E

D E C E M B E R    1 9 3 8

DEVELOPMENT FOOTAGE :- N I L  
CALCULATED INCHES OF GALENA:- 1.8"

---

L. VEIN EAST PORTION SQ OF S.2 in TOP FLAT.                      2.5" GALENA.

G. Short & Partner.                      45 $\frac{1}{2}$  Days Worked.  
L    H    S.F.    S.M.    W.    C.F.    C.M.    )  
41 x 8 - 328 - 30.47 x 6 - 1968 - 55.72 ) @ Days Wages

Tons to Mill:- 126.

Wages Paid £18. 6. 0.                      Cost per Cu.M.:- 6/7.

---

L. VEIN WEST PORTION S. OF S.2. V. in TOP FLAT.                      3" GALENA.

G. Moffatt & Partner.                      65 Days Worked.  
L    H    S.F.    S.M.    W.    C.F.    C.M.    )  
18 x 16 - 288 - 26.75 x 8 - 2304 - 65.23 ) @ Days Wages

Tons to Mill:- 165

Wages Paid £24. 13. 0.                      Cost per Cu.M.:- 7/7.

---

L.VEIN BETWEEN H.RAISE & S.1 VEIN in TOP FLAT                      1" GALENA

L. Liverick & Partner                      37 Days Worked  
L    H    S.F.    S.M.    W    C.F.    C.M.    )  
13 x 5 - 65 - 6.04 x 6 - 390 - 11.03 ) @ Days Wages

Tons to Mill:- 22

Wages Paid £14. 16. 0.                      Cost per Cu.M.:- 27/-

---

L.VEIN STRING S. OF THE VEIN in MIDDLE FLAT.                      2" GALENA

E.H.Walton & Partner.                      48 Days Worked  
L    H    S.F.    S.M.    W    C.F.    C.M.    )  
Drive 29 x 9 - 261 - 24.24 x 6 - 1566 - 44.33 ) @ Days Wages

Tons to Mill:- 110

Wages Paid £19. 4. 0.                      Cost per Cu.M.:- 8/8

---

S.2 VEIN STRING S. OF S.2 VEIN in MIDDLE FLAT.                      1.5" GALENA.

W.Liverick & Partner.                      48 Days Worked.  
L    H    S.F.    S.M.    W    C.F.    C.M.    )  
Drive 31 x 8 - 248 - 23.04 x 6 - 1488 - 42.13 ) @ Days Wages

Tons to Mill:- 88

Wages Paid £19. 4. 0.                      Cost per Cu.M.:- 9/1.

NENTSBURY MINE (CONTD.)

DECEMBER 1938.

S.2 VEIN STRING S. OF S.2 GOING W. in MIDDLE FLAT.      1" GALENA.

T. Richardson & Partner.      37 Days Worked.  
 L.    H.    S.F.    S.M.    W.    C.F.    C.M.    )  
 12 x 10 - 120 - 11.15 x 6 - 720 - 20.38    )  
 21 x 8 - 168 - 15.61 x 6 - 1008 - 28.53    ) @ Days Wages  
                                  1728 - 48.91    )

Tons to Mill:- 99

Wages Paid £14. 16. 0.      Cost per Cu.M.:- 6/-

D. VEIN BETWEEN H. RAISE & S.1. VEIN in TOP FLAT.      2" GALENA.

T. Hudspeth & Partner.      37 Days Worked.  
 L.    H.    S.F.    S.M.    W.    C.F.    C.M.    )  
 20 x 15 - 300 - 27.87 x 6 - 1800 - 50.96    )  
 9 x 9 - 81 - 7.52 x 8 - 648 - 18.34    ) @ Days Wages  
                                  2448 - 69.30    )

Tons to Mill:- 168

Wages paid £14. 16. 0.      Cost per Cu.M.:- 4/3

COX VEIN STRING      TOP FLAT.      2" GALENA.

M. Short & Partner.      35 Days Worked.  
 L.    H.    S.F.    S.M.    W.    C.F.    C.M.    )  
 28 x 15 - 420 - 39.01 x 6 - 2520 - 71.34    ) @ Days Wages

Tons to Mill:- 166

Wages Paid £14. 0. 0.      Cost per Cu.M.:- 3/11

SY. VEIN STRING N. in the TOP FLAT.      1.5" GALENA.

H. Kielty & Partner.      48 Days Worked.  
 L.    H.    S.F.    S.M.    W.    C.F.    C.M.    )  
 Drive 25 x 18 - 450 - 41.80 x 6 - 2700 - 76.45    ) @ Days Wages

Tons to Mill:- 155

Wages Paid £19. 4. 0.      Cost per Cu.M.:- 5/-

SY. VEIN STRING S. OF T. VEIN in TOP FLAT.      1.5" GALENA.

C. Stout & Partner.      42 1/2 Days Worked.  
 L.    H.    S.F.    S.M.    W.    C.F.    C.M.    )  
 Stope 52 x 5 - 260 - 24.15 x 6 - 1560 - 44.16    ) @ Days Wages

Tons to the Mill:- 88

Wages Paid £16. 18. 0.      Cost per Cu.M.:- 7/8

MENTSURY MINE (CONTD.)DECEMBER 1938.1ST SUN VEIN in LOW FLAT.WITHERITE ETC.42 Days Worked.

	L.	H.	S.F.	S.M.	W.	C.F.	C.M.
T.Hudspeth & partner)	9	x 9	- 81	- 7.52	x 8	- 648	- 18.35
R. Collin	) 10	x 10	- 100	- 9.30	x 9	- 900	- 25.48
L.Liverick	) 6	x 10	- 60	- 5.57	x 9	- 540	- 15.29
T.Richardson	) 7	x 7	- 49	- 4.55	x 6	- 294	- 8.32

2382 - 67.44

Tons to Mill:- 252

Wages Paid £16. 16. 0.

Cost per Cu.M.:- 5/-

## **NENTSBURY MINE & MILL DECEMBER 1938**

NENTSBURY MINE. The working days for December 1938 were 24.

The tonnage mined and milled consisted of 945 Tons of Lead, ore yielding 7.32% Galena and 252 Tons of Mixed Ore yielding 1.39% Galena and 112.97 Tons of Mixed Concentrates assaying 67.14% BaCO<sub>3</sub> and 14.15% Zn. This material was delivered to Messrs. Athole G. Allan (Stockton) Ltd., Stockton-on-Tees.

On instructions from Head Office and Mr. Chaplain arrangements were made to cease mining Lead Ore on December 24th (the end of the Company's year) and commence to mine Mixed Ore only on December 28th. Arrangements were accordingly made to cease mining Lead Ore on the 24th, and notice was given to 15 employees in the Mine, Mill, and Workshops to terminate their engagement with the Company on the 31st December.

During December, the experiment so far as mining and milling a parcel of Mixed Ore was carried out. A parcel of 252 Tons of Mixed Ore was mined, crushed and washed. Production therefrom was 112.97 Tons of Concentrates, and a sample sent to Dr. Michie of Newcastle, gave an average of 67.14% BaCO<sub>3</sub> and 14.15% Zn. This parcel was delivered to Messrs. Athole Allen Ltd., Stockton. A report of an interview with Mr. Allen and Dr. Tyrer on December 14th was sent to Mr. Chaplain, December 15th. Since that date no definite information has been received from Messrs. Allen. This firm is at present treating parcels of 4 tons of the Concentrates, and they have informed us that these tests may take some time, especially as they may have to retreat the residue to bring it up to the required percentage of 50% Zn.

Copies of all letters received are sent to Mr. Chaplain the same day as received or the day following. This is the position re: the Mixed Concentrates to date.

Assuming that Messrs. Allen can treat these concentrates successfully, it should be possible to produce the required quantity monthly and of an average grade of 65% BaCO<sub>2</sub> and from 12 to 15% Zn.

POTTERS ORE. Sales of Potters ore have not been large for two months.

GRAVEL SALES. Owing to the exceptionally bad weather during December, the sales of Gravel and stone were small. Orders for upwards of 1000 Tons of Gravel and Stone, of which 600 is for Stone, are in hand. We will deliver immediately the Contractor advises us to do so.

MILL. The Mill has had to be adjusted to meet the treatment of Mixed Ore. It is in good order.

RODDERUP FELL MINE.

DECEMBER 1938.

DEVELOPMENT FOOTAGE:- N I L

(C.53) W. Varty & Partner. 27 Days Worked.  
 L W S.F. S.M. H C.F. G.M. )  
 7 x 19 - 133 - 12.35 x 7.5 - 997.5 - 28.24 ) @ Days Wages

Tons to Mill:- 53

Wages Paid:- £10. 2. 6.                      Cost per Cu.M.:- 7/2

(B.51) R. Clark & Partner. 47 Days Worked.  
 L W S.F. S.M. H C.F. C.M. )  
 12 x 21.5 - 258 - 23.97 x 10.5 - 2709 - 78.01 ) 18 fat 5 ft @ 30/-

Tons to Mill:- 141

Total Money	£28.	5.	0.
Explosives	5.	13.	4.

£22. 11. 8.      Cost per Cu.M.:— 5/9.

(D.49) J. Dalkin & Partner. 48 Days Worked.  
 L W S.F. S.M. H. C.F. C.M. )  
 14.5 x 19 - 275.5 - 25.58 x 10 - 2755 - 76.70 ) 19 Fat. 1 ft. @ 30/-

Tons to Mill:- 139

Total Money	£28. 15. 0.
Explosives	6. 3. 0.

£22. 12. 0.      Cost per Cu.M.:— 5/11.

(C.48) F. Renwick & Partner. 72 Days Worked.  
 L W S.F. S.M. H C.F. C.M. )  
 19.5 x 21 - 409.5 - 38.04 x 12 - 4914 - 139.14 ) 34 fat. 1 ft. @ 33/-

Tons to Mill:- 251

Total Money	£56.	7.	6.
Explosives	7.	14.	8.

£48. 12. 10. Cost per Cu.M.:- 7/-

(F.39) T. Jackson & Partner.						<u>72 Days Worked.</u>	
L	W	S.F.	S.M.	H.	C.E.	C.M.	
10 x	8.5 -	85 -	7.89 x	10 -	850 -	24.07	)
17 x	20 -	340 -	31.59 x	11.5 -	<u>3910</u> -	<u>110.71</u>	) 29 fat @ 30/6
					4760 -	134.78	)
<u>Less</u>	17 x 7 -	119 -	11.05 x	5 -	<u>595</u> -	<u>16.85</u>	)
					4165 -	117.93	)

Tons to Mill:- 213

Total Money	£44. 4. 6.
Explosives	6. 1. 0.

£38. 3. 6.                      Cost per Cu.M.:- 6/6

RODDERUP MINE (CONTD.)      DECEMBER 1938.

(H.50)	<u>L. Bell &amp; Partners.</u>					<u>75½ Days Worked.</u>	
L	W	S.F.	S.M.	H	C.F.	C.M.	
20	x 4	- 80	- 7.43	x 13	- 1040	- 29.44	} 31 fat @ 31/6
13.5	x 22	- 297	- 27.59	x 10.5	- 3118.5	- 88.29	
9	x 7	- 63	- 5.85	x 5	- 315.0	- 8.91	
						<u>4473.5</u>	<u>- 126.64</u> }

Tons to Mill:- 229

Total Money    £48. 16. 6.  
Explosives        9. 1. 6.

£39. 15. 0.      Cost per Cu.M.:- 6/3

(C.43)	<u>P. Thompson &amp; Partners.</u>					<u>71 Days Worked.</u>	
L	W	S.F.	S.M.	H	C.F.	C.M.	
4.5	x 21	- 94.5	- 8.78	x 8	- 756	- 21.40	} @ 9/- per day.
16	x 21	- 336	- 31.20	x 4.5	- 1512	- 42.81	
25	x 10	- 250	- 23.22	x 3.5	- 875	- 24.77	
						<u>3143</u>	<u>- 88.98</u> }

Tons to Mill:- 161

Wages Paid £31. 19. 0.      Cost per Cu.M.:- 7/2.

(C.42)	<u>J.W. Robson &amp; Partners.</u>					<u>70 Days Worked.</u>	
L	W	S.F.	S.M.	H	C.F.	C.M.	
7	x 15	- 105	- 9.75	x 4.5	- 472.5	- 13.38	} @ Days Wages
12	x 18	- 216	- 20.07	x 9	- 1944	- 55.05	
						<u>2416</u>	<u>- 68.43</u> }

Tons to Mill:- 123

Wages Paid £32. 1. 8.      Cost per Cu.M.:- 9/4.

(D.41)	<u>G. Hind &amp; Partners.</u>					<u>71 Days Worked.</u>	
L	W	S.F.	S.M.	H	C.F.	C.M.	
13.5	x 29	- 391.5	- 36.36	x 7.5	- 2936	- 83.13	} @ 9/- per day
6	x 18	- 108.0	- 10.03	x 9.5	- 1026	- 29.06	
						<u>3962</u>	<u>- 112.19</u> }

Tons to Mill:- 202

Wages Paid £31. 19. 0.      Cost per Cu.M.:- 5/8.

(B.C. 70)	<u>W. Watson &amp; Partners.</u>					<u>51 Days Worked.</u>	
L	W	S.F.	S.M.	H	C.F.	C.M.	
8	x 18	- 144	- 13.38	x 12	- 1728	- 48.93	} 20 fat 2 ft @ 30/6.
6.5	x 15.5	- 100.75	- 9.36	x 12	- 1209	- 34.23	
						<u>2937</u>	<u>- 83.16</u> }

Tons to the Mill:- 150

Total  
Wages Money    £31. 0. 2.  
Explosives       5. 19. 4.

£25. 0. 10.      Cost per Cu.M.:- 6/-



## **RODDERUP MINE & MILL DECEMBER 1938**

MINE. The number of days worked in December were 24. The tonnage mined was 1662 Tons, and milled 1637 Tons. Galena Concentrates recovered amounted to 106.50 Tons. The percentage recovered was 6.5%. The recovery percentage was just the same as in November. Instructions were received from Head Office and Mr Chaplain that Rodderup Mine and Mill were to be closed at the end of the year. Notices were duly posted, and the workpeople paid off December 24<sup>th</sup>, except four, who have been retained to maintain the mine, watercourses, and Mill, until some definite arrangement has been made. A Report dealing with the question of Rodderup will be submitted early in the New Year.

MILL. The Mill is in good running order.

9/3	616	5/3	945
5/3	9321	4/3	322
1/3	5901	4/3	652
9/3	5100	2/3	855
4/3	616	5/3	209
2/3	616	1/3	427
4/3	388	1/3	665
1/3	3001	2/3	666
2/3	6101	1/3	697
2/3	5021	2/3	099
2/3	4651	2/3	289
2/3	9211	2/3	556

with 10-8 cm. dia.

De Mr. Treloar  
De. Mr. Chaplain

Nenthead 19<sup>th</sup> January 1939

## **ANNUAL REPORT OF THE NENTHEAD MINES 1938**

### **(1) NENTSBURY**

For preparing the Budget for 1938, the price of Lead for 1938 was given by Head Office on October 1<sup>st</sup> 1937, as £20 per ton. The actual Lead price for 1938 was £15.32433.

The estimated tonnage given in the Budget was 12000 Tons with a value of 6% Galena and 2.5% Blende. The tonnage actually mined and milled during 1938, was 14668 Tons, of which 252 Tons was from Mixed Ore. Lead Ore milled was 14416 Tons, and the Galena Concentrates produced were 1024 Tons, giving a recovery of 7.10%. The Mixed Ore mined and milled amounted to 252 Tons, from which was recovered 3.5 Tons of Galena Concentrates, and 112.97 Tons of Mixed Concentrates. The total ore mined was 14668 Tons. The total ore milled was 14668 Tons. There was also produced during 1938, shipped to Belgium, 81.428 Tons of Zinc Concentrates.

The estimated cost per ton of ore mined was given in the Budget for 1938 as 20/-, not including Development. Actual cost for 11 months was 18.32/- per ton of ore mined, including Development.

Ore Reserves. The Ore Reserves calculated Dec. 24<sup>th</sup> 1937, was 85167 Tons. During the year we extracted 14668 Tons, of which 14416 Tons were from the Lead Veins and 252 Tons from the Mixed Ore Veins. It will be noted that although by estimation we only had 6926 Tons in reserve in Lead Veins on December 24<sup>th</sup> 1937, we extracted 14416 Tons from these Veins, and on Dec. 24<sup>th</sup> 1938, we still had 3112 Tons in Lead Veins, and 75166 Tons in the Mixed Ore Veins, making a total of 78278 Tons. During 1938, a considerable portion of the Tonnage mined from Lead Veins came from Strings and Small side Veins discovered during the year and which were not known at the end of 1937. Calculated thus, the tonnage at the end of 1937 was 85176 Tons. Although 14668 Tons had been extracted, the Ore Reserves, Dec. 24<sup>th</sup> 1938, were 78278 Tons. Thus Side Strings and Small Lead Veins accounted for 7770 Tons.

DEVELOPMENT. During the year 145.06metres was driven, mainly in a drive from the Boundary Rise to cut a N. & S. String reported to be in existence and to be payable. In August this Vein was discovered, but was not payable and work was stopped. No payable ore was discovered during 1938. Owing to the price of Lead only a small amount of Development was done.

MIXED ORE. Towards the end of 1938, the price of Lead showed no improvement, and it was decided to cease mining Lead Ore at the end of the year.

In August Messrs. Athole G. Allen (Stockton) Ltd, chemical manufacturers of Stockton-on-Tees, carried out some laboratory experiments on Mixed Concentrates produced from Mixed Ore, and containing BaCO<sub>3</sub>, Zn, and a small percentage of Galena. On Nov. 4<sup>th</sup>, Messrs. Chaplain and Treloar interviewed Messrs. Allen and Dr Tyrer, Directors of Messrs Athole G. Allen Ltd., at Stockton, and on Nov. 12<sup>th</sup> we received instructions to carry out an experiment on a parcel of Mixed Ore from Nentsbury Mixed Veins. This experiment was carried out from Nov. 28<sup>th</sup> to Dec. 3<sup>rd</sup>, and on Dec. 12<sup>th</sup> we commenced the delivery of the concentrates to Messrs. Athole G. Allen Ltd., at Stockton. The result of the 252 Tons crushed, gave a return of 3.5 Tons of Galena Concentrates produced in the Mill, and 112.79 Tons (wet weight) of Mixed Concentrates. A full report of the interview was sent to Mr Chaplain on the 15<sup>th</sup> instant. The mining of Lead was stopped on December 24<sup>th</sup> 1938.

OUTLOOK FOR 1939. All work having been stopped in connection with the production of Galena Concentrates, the outlook for 1939 rests upon the success of mining Mixed Ore and producing Mixed Concentrates. Messrs. Allen Ltd/. Offered to purchase 250 Tons of 100% BaCO<sub>3</sub> monthly. To produce this quantity would require mining 867 Tons of Mixed Ore monthly, and producing therefrom 385 Tons of Mixed Concentrates to assay 65% BaCO<sub>3</sub>. To yield a value of about £2 per ton of concentrates delivered to Stockton, the Concentrates should assay 65% BaCO<sub>3</sub> and about 14.5% Zn. Respecting the production of 385 Tons monthly, this quantity can be produced, and the assay value should be about 65% BaCO<sub>3</sub>, and although the percentage of Zn. Might vary from month to month, an average content of 14.5% over 6 months to a year should be possible.

The question for the V.M. Co. to consider, seems to be a basis of results and mode of payment for the Concentrates delivered to Stockton.. It will be remembered that Messrs. Allen Ltd have undertaken to accept sufficient Mixed Concentrates to yield 250 Tons of 100% BaCO<sub>3</sub> monthly, and to pay on the basis of 52/- per ton for 100% BaCO<sub>3</sub> content at Stockton, and to hand over the residue containing the Zn. To the V.M. Co., and to raise the Zn. Content in the residue to about 50%.

As Messrs. Allen Ltd. Will not be able to treat 385 Tons monthly for some time, the Company should, I suggest consider how and when the V.M. Co. should be paid for the Concentrates delivered monthly. Once that question is settled it will not be difficult to determine if the mining of Mixed Ore is a success, and until that matter is settled only a rough calculation can be made.

If the question of value and payment is satisfactory, we can continue producing 385 Tons of Concentrates monthly for at least three years.

Should the mining of Mixed Ore be more or less payable there is the possibility of finding more Lead Ore in the Mixed Veins, and possibly a N. or S. Vein may

be discovered. Mining Mixed Ores might almost be regarded as a Development programme for the discovery of Lead Ore.

A handwritten signature in black ink, appearing to read "A. J. Helo" with a stylized flourish at the end.

De Mr. Treloar  
De. Mr. Chaplain

Nenthead 19<sup>th</sup> January 1939

**ANNUAL REPORT OF THE NENTHEAD  
MINES 1938**

**(2) RODDERUP**

The price of Lead for calculating Budget figures for 1938 was given by Head Office on October 1<sup>st</sup> 1937, as £20 per ton. The actual Lead price for 1938 was £15.32433.

The tonnage estimated to be broken was given in the Budget as 30,000 Tons with a value of 6.5% Galena. The Tonnage actually broken was 22993 Tons, with an actual value of 6.46% Galena. The Galena Concentrates recovered during 1938 amounted to 1485.900 Tons.

The estimated cost per ton of Mine Ore, exclusive of Development, was 14.50/- per ton. The actual cost including Development, for 11 months, was 15.07/- per ton.

The estimated value of 1 Ton of Mine Ore, with Lead at £20 per ton, and including Silver value, is £17.225/- per ton. The value of 1 Ton of Mine Ore with Lead at £15.32 per ton, including silver value, is actually 12.025/- per ton. The difference, due to the variation in the price of Lead, equals 5.200/- per ton of Mine Ore.

The estimated profit per ton of Mine Ore, given in the Budget of October 1937, was 2.725/-, not including Gravel value which was deducted from the cost of Milling. Deducting 2.725/- from 5.200/-, the difference due to the fall in the price of Lead, gives 2.475/- per ton of Mine Ore. 22993 x 2.475/- equals 56707.6/-. The loss for 11 months was 57265.23/- to which must be added the loss for December, which will probably bring the total loss for the year to 63000/-. In the estimated cost in the Budget prepared October 1937, Development cost was not included. In the actual figure of 15.07/- per ton Development is included. The drop in the price of Lead and the inclusion of the cost of Development accounts for the difference between the Budget figures and the actual results.

Owing to the low price of Lead, and the low grade of the ore mined at Rodderup, the results for January 1938, showed a loss which varied monthly throughout the year. Various methods were tried to mine the ore and pick it, to increase the yield, without success. Ultimately, we considered that although we budgeted to mine 30000 Tons it was better to confine the output to just enough to supply the Mill two shifts, rather than to break the quantity estimated, which would have reduced the standing charges per ton, but the reduction of the Standing Charges per ton would not be sufficient to meet the loss per ton.

On December 24<sup>th</sup> 1938 work was stopped, and except for maintaining the mine, mill, and watercourses, for which the services of four employees were retained, all employees were paid off.

ORE RESERVES. The formation of the ore deposits do not permit of close calculations of ore reserved. Consequently, in the past, we have marked out an area, and, having driven N. & S. at various points and found ore, and extended E. and W. and found ore, and knowing the height, we have taken the cubic footage of each area and allowed 50% for pillars and unpayable portions. This somewhat rough and ready calculation worked out satisfactorily in the past.

In December 1937, I considered that 100000 Tons of ore was an underestimate of the ore reserves. Although we have mined 22995 Tons, I consider the Ore Reserves on Dec. 24<sup>th</sup> 1938, exceeded 100000 Tons. The reason for this is we have during the year opened up more extensively the area E. of No.1 shaft, and also developed to a limited extent the area South from the bottom of the Incline. Both these areas were producing ore of an average grade when work was suspended on December 24<sup>th</sup>. In my judgment, we have at least 120000 Tons of Ore in reserve of an average value of approximately 6.5% Galena. In other words, we have four years supply for the Mill, if 30000 Tons annually was mined, and the probability that considerably more could be mined, if the price of Lead was above £18 per ton, without loss. With Lead at £20 per ton, the mine could yield a profit of from £3500 to £5000 on a 6.5% ore yield, and with costs at 15/- per ton, and crushing 25000 to 30000 Tons per annum.

ELECTRICAL EQUIPMENT. During the year, we had no trouble with the electric plant, and at the end of the year it was in first class condition.

GENERAL. Rodderup is a poor mine but one where the costs per ton are 30% lower, at least, than any metalliferous mine in England. It is equipped inside with up to date machinery, and outside with a very good Mill, both capable of producing and dealing with 30000 Tons per annum.

A reduction in the cost of transport could be made if mechanical haulage was substituted for horse labour. Mechanical haulage would overcome the difficulty and loss caused when the level is flooded after heavy rain or melted snow.

The future of Rodderup is entirely dependent upon the price of Lead. There is however one thing that could be attempted, and that is the opening up and developing of the 30Fathom Level, below the Blackburn Level, where prior to 1930, ore was mined which gave 9% Galena recovery. This of course could only be considered if funds were available for the work, and if the price of Lead was sufficiently high to warrant it. It would however provide an ore deposit, I think, which would be workable and payable at lower Lead prices than is possible now.

Unless there are funds available at present to do this work, the future of Rodderup remains dependent upon the price of Lead.



## Report on the Nenthead Mines January 1939

### REPORT ON THE NENTHEAD MINES 0000000000 000 00000 0000000000000000 0000000000

JANUARY 1939.

	<u>Nentsbury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Totals.</u>
Ore mined	1047 Tons.	One Steam	-	1047 Tons
Ore Milled	1047 "	Engine ran	56 Tons	1103 "
Lead Concs. prd	20.85 "	8 hours daily. One		
% of Galena	1.99%	Fuel Oil 5.75 "		26.60 "
Mxd. Concs prd	376 Tons	Engine occas		N. R.
% of Mxd. Concs.	27.8%	ionally. 10.26%		1.99% 10.26%
Hours worked	256 hrs.			
Tons per hour	4.09 Tons			
			10 hrs. 256	N. R. 10
			5.6 Tons 4.09	5.6

PLEASE NOTE:- In the above tonnage from Nentsbury about 100 Tons of Lead Ore left in the Rises was trammed and crushed

#### S T O C K S.

	<u>Nentsbury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Wellhope.</u>	<u>Totals.</u>
Crude Ore	Nil.	Nil.	Nil.	2300 Tons.	2300 Tons
Blende-					
Witherite	1125 Tons	250 Tons	150 Tons	Nil.	1525 Tons.

The whole of the 376 Tons of Mixed Concentrates produced was delivered to Messrs. Athole G. Allen Ltd. Stockton-on-Tees.  
 666

Rough Blende - NIL.  
 Fine Blende - NIL.

Galena at Nentsbury, 35.45 Tons, Potters Ore at Nentsbury, 44.30 Tons.  
 " " Rodderup, 26.60 " , " " " Rodderup, 58.75 "

COAL,	consumed at Rampgill	-	25.00 Tons.
FUEL OIL,	" " "	-	2.50 " .
" "	" " Nentsbury	-	2.50 " .
" "	" " Rodderup	-	NIL.

COMPRESSED AIR produced at Nenthead & Wellhope, 800 cu. ft. per minute for 9 hours daily. Pressure at face, 80 lbs per square inch.

COMPRESSED AIR produced at Rodderup using water for the Hydro-Compressor, and one small Schram Compressor when required, about 400 cu. ft. per minute daily at 80 lbs. pressure for pumping.

Radio Station for Jan. 19.

See Previous.

Sheet No. 1255

Month of January 1902.

Station from Previous Month & P.	Galena Values		P.P. Remaining		Previous Month's B.R.		P.P. Remaining		Blonde Values		Vichitka Values	
	bu. ft	lbs	bu. ft	lbs	bu. ft	lbs	bu. ft	lbs	bu. ft	lbs	bu. ft	lbs
Station of Vich	-	-	1574	100	-	-	-	-	-	-	-	-
Station of Vich	-	-	54153	3000	-	-	-	-	-	-	-	-
Station of Vich	-	-	-	-	-	-	-	-	-	-	-	-
Station of Vich	-	-	-	-	-	-	-	-	-	-	-	-
Station of Vich	6272	348	89977	49629	89977	49629	89977	49629	89977	49629	89977	49629
Station of Vich	-	-	1541	1841	1541	1841	1541	1841	1541	1841	1541	1841
Station of Vich	-	-	41940	2330	41940	2330	41940	2330	41940	2330	41940	2330
Station of Vich	2876	271	378318	27447	378318	27447	378318	27447	378318	27447	378318	27447
Station of Vich	11147	619	1409009	78275	1409009	78275	1409009	78275	1409009	78275	1409009	78275

Name of Skin	Galena Values		Blonde Values		Vichitka Values	
	bu. ft	lbs	bu. ft	lbs	bu. ft	lbs
Station of Vich	1874	100	-	-	-	-
Station of Vich	54153	3000	-	-	-	-
Station of Vich	-	-	-	-	-	-
Station of Vich	89977	49629	89977	49629	89977	49629
Station of Vich	1541	1841	1541	1841	1541	1841
Station of Vich	41940	2330	41940	2330	41940	2330
Station of Vich	378318	27447	378318	27447	378318	27447
Station of Vich	1409009	78275	1409009	78275	1409009	78275

N E N T S B U R Y      M I N E  
MONTH OF JANUARY 1939.

DEVELOPMENT FOOTAGE :- Nil.

"T" VEIN BETWEEN ROBINSON & L. VEIN IN LOW FLAT.      MIXED ORE.

C. Stout & Partner. 47½ Days Worked.  

L	H	S.F.	S.M.	W	C.F.	C.M.	
9 x 15	-	135	-	12.55	x 9	-	1215 - 34.401.) @ Days Wages.

Tons to Mill:- 113

Wages Paid £19. 0. 0. Cost per Cu.M.:- 11/1.

S.1 VEIN E. ON HORSE LEVEL IN THE LOW FLAT.      MIXED ORE.

G. Short & A. Harrison & Partners. 79 Days Worked.  

L	H	S.F.	S.M.	W	C.F.	C.M.	
10 x 13	-	130	-	12.09	x 10	-	1300 - 36.809 )
8 x 11	-	88	-	8.17	x 10	-	880 - 24.917 )
Rise 13 x 6	-	78	-	7.24	x 6	-	468 - 13.251 ) @ Days Wages
						2648	- 74.977 )

Tons to Mill:- 249

Wages Paid £31. 12. 0. Cost per Cu.M.:- 8/5.

S.1. VEIN E. ON HORSE LEVEL IN THE LOW FLAT.      MIXED ORE.

R. Collin & Partner. 45 Days Worked.  

L	H	S.F.	S.M.	W	C.F.	C.M.	
21 x 10	-	210	-	19.51	x 8	-	1680 - 47.569 ) @ Days Wages.

Tons to Mill:- 159

Wages Paid £18. 0. 0. Cost per Cu.M.:- 7/6.

S.1. VEIN E. ON HORSE LEVEL IN LOW FLATT.      MIXED ORE.

T. Hudspeth & Partner. 53 Days Worked.  

L	H	S.F.	S.M.	W	C.F.	C.M.	
27 x 9	-	243	-	22.57	x 8	-	1944 - 55.044 ) @ Days Wages.

Tons to Mill:- 182

Wages Paid £21. 4. 0. Cost per Cu.M.:- 7/8.

"T" VEIN E. OF "L" IN MIDDLE RANDOM.      MIXED ORE.

M. Short & Partner. 49½ Days Worked.  

L	H	S.F.	S.M.	W	C.F.	C.M.	
14 x 12	-	168	-	15.61	x 6	-	1008 - 28.541 ) @ Days Wages.

Tons to Mill:- 95

Wages Paid £19. 18. 0. Cost per Cu.M.:- 14/-

NENTSBURY MINE (CONTINUED)

JANUARY 1939.

"T" VEIN E. OF "L" VEIN IN TOP FLAT.

MIXED ORE.

H. Johnston & Partner.

49 Days Worked.

L    H    S.F.    S.M.    W.    C.F.    C.M.    )  
26 x 17 - 442 - 41.06 x 6 - 2652 - 75.091    @ Days Wages

Tons to Mill:- 249

Wages Paid £19. 12. 0.

Cost per Cu.M.:- 5/3.

---

## **NENTSBURY MINE & MILL JANUARY 1939**

NENTSBURY MINE. The working days for January were 24.

The number of employees in the Mine, Mill, and Workshops, was reduced by 16, as from Dec. 31<sup>st</sup> 1938. Milling was confined to one shift from January 3<sup>rd</sup> 1939, and Mining to one shift from mid-January.

Including about 100 Tons of Lead Ore left in the rises, the quantity mined and crushed during January amounted to 1047 Tons. All the ore mined during January was Mixed Ore. Production from the 1047 Tons crushed amounted to 376 Tons of Mixed Concentrates. The whole of which was delivered to the works of Messrs. Athole G. Allen Ltd at Stockton-on-Tees, and 20.85 Tons of Lead Concentrates. Considering that January, contained only 24 working days, compared with an average of 25.5 working days, the production of 376 Tons of Mixed Concentrates, compared to the estimated tonnage of 385 Tons for a normal month, is satisfactory and indicates that we can produce the quantity estimated and referred to in the letter to Mr. Chaplain., dated Dec. 15th 1938. Samples of the three sizes of Mixed Concentrates were sent to Belgium on January 30th.

It must be taken into consideration that the results for January do not represent a normal months working. The year 1938, ended December 24th because Dec. 25th, 26th, & 27th were Xmas holidays, and the 16 employees referred to, who left the Co.'s employment, did not leave before Dec. 31st. January 2nd was also a holiday. In addition, the working places to mine Mixed Ore had to be prepared, and it was sometime in mid-January before we were working normally.

Respecting the value of a ton of Mixed Concentrates, Messrs. Allen Ltd. undertook. to pay the V.M. Co., 52/- per ton of Witherite (100% BaCO<sub>3</sub>) and to hand to the V.M. Co. the residue after the BaCO<sub>3</sub> is dissolved out. The residue will contain all the Zinc, and Messrs. Allen Ltd., through Dr. Tyrer, definitely state the loss in treatment is negligible. Therefore, on the basis of Dr. Tyrer's analysis, the calculated value of 1 Ton of Mixed Concentrates, assaying 65% BaCO<sub>3</sub>, plus 14.85% Zn, the residue to be raised to 45% Zn, and calculated with Spelter at £13.5 per ton, is 38.63/- per ton.

Since the month ended I have visited Stockton on Feby. 1<sup>st</sup>, and conversed with Mr Allen & Dr Tyrer, and reported fully the following day. Today (Feby. 8<sup>th</sup>) I have obtained further information from Dr Tyrer by telephone, which I sent to Mr Chaplain at once.

POTTERS ORE. Sales of Potters Ore have been small.

GRAVEL SALES. The exceptionally bad weather in January for two weeks during which most of the roads were blocked with snow, held up all road work, and throughout January there was little work done.

MILL. This ran well for an average of over 10 hours five days weekly and 6 hours on Saturdays, as compared with 8 hours two shifts, previously when the Mill was fully supplied. The cost per ton should be lower.

**RODDERUP FELL  
JANUARY 1939**

The mine was closed Dec. 24<sup>th</sup> 1938, and from that date 4 men only have been employed to keep the mine un-watered and the Mill machinery and watercourses attended to. During the month 56 Tons of ore was crushed, including 25 tons in stock, and ore scrapings from the Mill. Production therefore amounted to 5.75 Tons of Galena Concentrates. The percentage, 10.26%, must not be regarded as normal.

I outlined a small scheme for breaking and milling sufficient ore monthly to produce 17.75 Tons of Lead Concentrates, which should meet most of the cost of working and maintenance, and this was submitted early in January, on 4 monthly periods. This has since been approved, and will be put into effect in February. I am confident this scheme will cost the Company less than if they have to maintain the mine and mill even for one year.

We shall not use electric power.





# Report on the Nenthead Mines February 1939

## REPORT ON THE NENTHEAD MINES

FEBRUARY 1939.

	<u>Nentsbury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Totals.</u>
Ore Mined	1071 Tons	One Steam Engine ran 8 hours daily. One Fuel Oil Engine ran occasionally.	197 Tons	1268 Tons.
Ore Milled	1071 "		197 "	1268 " .
Lead Cons. prod.	31.30 "		18.34 "	49.64 " .
% of Galena	2.92%		9.31%	2.92% 9.31%
Mixed Concs. prod.	402.75 "			352.75 (Ex mine 50.00 (Ex-Stock 402.75 Total.
(equals 50.00 from Stock Middlings and 352.75 Tons from Mixed Mine Ore)				
% of Mxd. Concs. from 306 Tons Mxd. Mine Ore	43.76%			32.93%
(Average % on 1071 Tons Mine Ore broken - 32.93%)				
( & 352.75 Tons recovered )				
Hours Worked	257 hours.		36 hours	N. R. 257 36
Tons per hour	4.16 Tons		5.47 Tons	4.16 5.47

### STOCKS.

	<u>N'bury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Wellhope.</u>	<u>Totals.</u>
Crude Ore	Nil	Nil.	Nil.	2300 Tons	2300 Tons.
Blende-Witherite	975 Tons	250 Tons	150 Tons	Nil.	1375 Tons.

During the month 150 Tons of Stock Middlings were treated at Nentsbury Mill. Production of Mixed Concentrates therefrom, 50 Tons. Including a balance of 6.625 Tons delivered after the 26th of Janry, and added to 369.95 Tons delivered in Febry. , the total quantity delivered to Stockton since commencing in December amounts to 865.545 Tons wet weight of Mixed Concentrates.

Rough Blende - Nil.	
Fine Blende - Nil.	
Galena at Nentsbury,	28.20 Tons; Potters Ore at Nentsbury, 20.55 Tons.
Galena at Rodderup,	2.94 Tons; Potters Ore at Rodderup, 47.151 Tons.

Coal	consumed at Rampgill,	30.7 Tons.
Fuel Oil	" " "	1.5 "
"	" " Nentsbury,	2.5 "
"	" " Rodderup,	Nil. "

COMPRESSED AIR produced at Nenthead & Wellhope, 800 Cu. Feet per minute for 8 to 9 hours daily. Pressure at face, 75 to 80 lbs per square inch.

COMPRESSED AIR produced at Rodderup, using Water power only, and operating the Hydro-Compressor and one small Schram Compressor, 400 Cu. Feet per minute at 75 to 80 lbs pressure. The Compressed Air produced is used for pumping and working 2 Rock-Drills when required.

Previous from Previous Months B.R.		Balance Value		Months of February 1952		Balance Value		Without Value	
Name of Unit	Bu. ft	Vols	Previous Months B.R.	Bu. ft	Vols	Previous Months B.R.	Bu. ft	Previous Months B.R.	Bu. ft
Expend Unit	1608	89	104	266	15				
Expend Unit	1092	61	54153	53061	2947				
Expend Unit	-	-	-	-	-				
Expend Unit	2448	136	-	-	-				
Expend Unit	10488	581	893304	882846	49048	893304	882846	49048	893304
Expend Unit	-	-	33148	33148	1841	33148	33148	1841	33148
Expend Unit	240	15	41940	41640	2315	41940	41640	2315	41640
Expend Unit	5040	280	373443	368403	20467	373443	368403	20467	373443
Expend Unit	20916	1162	77659	1379394	76633	1341835	74547	1326067	73671
Balance Value									
Name of Unit	Bu. ft	Vols	Previous Months B.R.	Bu. ft	Vols	Previous Months B.R.	Bu. ft	Previous Months B.R.	Bu. ft
Expend Unit	266	15	1						
Expend Unit	53061	2947	147						
Expend Unit	-	-	-						
Expend Unit	-	-	-						
Expend Unit	882846	49048	8	882846	49048	10	882846	49048	10
Expend Unit	33148	1841	6	33148	1841	15	33148	1841	15
Expend Unit	41640	2315	6	41640	2315	5	41640	2315	5
Expend Unit	368403	20467	5	368403	20467	5	368403	20467	5
Expend Unit	1349394	76633	108	1349394	76633	108	1349394	76633	108
Balance Value									
Name of Unit	Bu. ft	Vols	Previous Months B.R.	Bu. ft	Vols	Previous Months B.R.	Bu. ft	Previous Months B.R.	Bu. ft
Expend Unit	266	15	1						
Expend Unit	53061	2947	147						
Expend Unit	-	-	-						
Expend Unit	-	-	-						
Expend Unit	882846	49048	8	882846	49048	10	882846	49048	10
Expend Unit	33148	1841	6	33148	1841	15	33148	1841	15
Expend Unit	41640	2315	6	41640	2315	5	41640	2315	5
Expend Unit	368403	20467	5	368403	20467	5	368403	20467	5
Expend Unit	1349394	76633	108	1349394	76633	108	1349394	76633	108
Balance Value									
Name of Unit	Bu. ft	Vols	Previous Months B.R.	Bu. ft	Vols	Previous Months B.R.	Bu. ft	Previous Months B.R.	Bu. ft
Expend Unit	266	15	1						
Expend Unit	53061	2947	147						
Expend Unit	-	-	-						
Expend Unit	-	-	-						
Expend Unit	882846	49048	8	882846	49048	10	882846	49048	10
Expend Unit	33148	1841	6	33148	1841	15	33148	1841	15
Expend Unit	41640	2315	6	41640	2315	5	41640	2315	5
Expend Unit	368403	20467	5	368403	20467	5	368403	20467	5
Expend Unit	1349394	76633	108	1349394	76633	108	1349394	76633	108
Balance Value									

NENTSURY MINE.

MONTH OF FEBRUARY 1939.

DEVELOPMENT FOOTAGE:- NIL.

CALCULATED INCHES OF GALENA :-  $2\frac{1}{2}''$

WITHERITE-BLENDE-GALENA ORES.

S.1. VEIN E. OF No.11 IN THE LOW FLAT.

J.G. Armstrong & Partner. 22 days worked.  
L H S.F. S.M. W C.F. C.M. )  
18 x 9 - 162 - 15.06 x 6 - 972 - 27.52 ) @ Days Wages.

Tonnage to Mill:- 47

Wages Paid £8. 16. 0.

Cost per Cu.M.:- 6/5.

S.1 VEIN W. OF No.11. IN THE LOW FLAT.

R. Collin & Partner. 49 22 days worked.  
L H S.F. S.M. W C.F. C.M. )  
Drive 27 x 17 - 459 - 42.64 x 8 - 3672 - 103.97 )  
Rise 6 x 6 - 36 - 3.34 x 6 - 216 - 6.11 ) @ Days Wages  
3888 - 110.08 )

Tonnage to Mill:- 188

Wages Paid £19. 12. 0.

Cost per Cu.M.:- 3/7.

S.1 VEIN E. OF No.9 IN THE LOW FLAT.

A. Harriscn & Partner. 30 Days Worked.  
L H S.F. S.M. W C.F. C.M. )  
Drive 12 x 13 - 156 - 14.5 x 10 - 1560 - 44.16 )  
Rise 12 x 6 - 72 - 6.68 x 6 - 432 - 12.22 ) @ Days Wages  
1992 - 56.38 )

Tonnage to Mill:- 96

Wages Paid £12. 0. 0.

Cost per Cu.M.:- 4/3.

S.1 VEIN E. OF No.9 IN THE LOW FLAT.

G. Short & Partner. 36 1/2 days worked.  
L H S.F. S.M. W C.F. C.M. )  
15 x 13 - 195 - 18.11 x 10 - 1950 - 55.21 )  
8 x 7.5 - 60 - 5.57 x 6 - 360 - 10.18 ) @ Days Wages.  
2310 - 65.39 )

Tonnage to Mill:- 112

Wages Paid £14. 12. 0.

Cost per Cu.M.:- 4/5.

S.1 VEIN W. OF No. 9 IN THE LOW FLAT.

C. Armstrong. 25 Days worked.  
L H S.F. S.M. W C.F. C.M. )  
Drive 24 x 9 - 216 - 20.06 x 6 - 1296 - 36.68 ) @ Days Wages.

Tonnage to Mill:- 64

Wages paid £12. 10. 0.

Cost per Cu.M.:- 6/9.

NENTSBURY MINE (CONTD.) FEBRY. 1939.

TRELOAR VEIN EAST.

IN THE LOW FLAT.

C. Stout & Partner.

37 Days Worked.

L	H	S.F.	S.M.	W	C.F.	C.M.	)
Drive 23	x 12	- 276	- 25.64	x 6	- 1656	- 46.88	) @ Days Wages

Tonnage to Mill:- 81.

Wages Paid £14. 16. 0.

Cost per Cu.M.:- 6/4.

TRELOAR VEIN E. OF L. VEIN

IN THE MIDDLE FLAT.

Wm. Liverick & Partner.

36 Days Worked.

L	H	S.F.	S.M.	W	C.F.	C.M.	)
7 x 28	- 196	- 18.22	x 6	- 1176	- 33.29	)	
10 x 12	- 120	- 11.16	x 6	- 720	- 20.38	)	@ Days Wages
				1896	- 53.67	)	

Tonnage to Mill:- 92.

Wages paid £14. 8. 0.

Cost per Cu.M.:- 5/4.

TRELOAR VEIN E. OF L. VEIN

IN THE MIDDLE FLAT.

H. Kielty & Partner

26 Days Worked.

L	H	S.F.	S.M.	W	C.F.	C.M.	)
30 x 23	- 690	- 64.10	x 6	- 4140	- 117.22	)	
Less 26 x 17	- 442	- 41.06	x 6	- 2652	- 75.09	)	@ Days Wages
				1488	- 42.13	)	

Tonnage to Mill:- 72

Wages Paid £10. 8. 0.

Cost per Cu.M.:- 4/11.

COX VEIN S. OF S.2 VEIN

IN THE MIDDLE FLAT.

H. Johnston & Partner

19 Days Worked.

L	H	S.F.	S.M.	W	C.F.	C.M.	)
14 x 13	- 182	- 16.92	x 6	- 1092	- 30.90	)	@ Days Wages

Tonnage to Mill:- 54

Wages paid £7. 12. 0.

Cost per Cu.M.:- 5/-

LEAD ORE.

L. VEIN S. OF S.2

IN THE TOP FLAT

2 1/2" GALENA.

G. Moffatt & Partners.

34 days worked.

L	H	S.F.	S.M.	W	C.F.	C.M.	)
17 x 18	- 306	- 28.42	x 8	- 2448	- 69.31	)	@ Days Wages

Tonnage to Mill:- 143

Wages Paid £13. 12. 0.

Cost per Cu.M.:- 3/11.

NENTSBURY MINE (CONTD.) FEBRY. 1939.

TRELOAR VEIN EAST.

IN THE LOW FLAT.

C. Stout & Partner.

37 Days Worked.

L	H	S.F.	S.M.	W	C.F.	C.M.	
Drive 23 x 12	-	276	-	25.64	x 6	-	1656 - 46.88

Tonnage to Mill:- 81.

Wages Paid £14. 16. 0.

Cost per Cu.M.:- 6/4.

TRELOAR VEIN E. OF L. VEIN

IN THE MIDDLE FLAT.

Wm. Liverick & Partner.

36 Days Worked.

L	H	S.F.	S.M.	W	C.F.	C.M.	
7 x 28	-	196	-	18.22	x 6	-	1176 - 33.29
10 x 12	-	120	-	11.16	x 6	-	720 - 20.38
							1896 - 53.67

Tonnage to Mill:- 92.

Wages paid £14. 8. 0.

Cost per Cu.M.:- 5/4.

TRELOAR VEIN E. OF L. VEIN

IN THE MIDDLE FLAT.

H. Kielty & Partner

26 Days Worked.

L	H	S.F.	S.M.	W	C.F.	C.M.	
30 x 23	-	690	-	64.10	x 6	-	4140 - 117.22
Less 26 x 17	-	442	-	41.06	x 6	-	2652 - 75.09
							1488 - 42.13

Tonnage to Mill:- 72

Wages Paid £10. 8. 0.

Cost per Cu.M.:- 4/11.

COX VEIN S. OF S.2 VEIN

IN THE MIDDLE FLAT.

H. Johnston & Partner

19 Days Worked.

L	H	S.F.	S.M.	W	C.F.	C.M.	
14 x 13	-	182	-	16.92	x 6	-	1092 - 30.90

Tonnage to Mill:- 54

Wages paid £7. 12. 0.

Cost per Cu.M.:- 5/-

LEAD ORE.

L. VEIN S. OF S.2

IN THE TOP FLAT

2 1/2" GALENA.

G. Moffatt & Partners.

34 days worked.

L	H	S.F.	S.M.	W	C.F.	C.M.	
17 x 18	-	306	-	28.42	x 8	-	2448 - 69.31

Tonnage to Mill:- 143

Wages Paid £13. 12. 0.

Cost per Cu.M.:- 3/11.

NENTSBURY MINE (CONTD.)FEBRY. 1939.D. VEIN BETWEEN H.R. AND S.1 VEIN IN TOP FLAT.2 $\frac{1}{2}$ \* GALENA.T. Hudspeth & Partners.

28 Days Worked.

L	H	S.F.	S.M.	W	C.F.	C.M.		
10	x 12	= 168	= 15.61	x 7	= 1176	= 55.29	) @ Days Wages	
18	x 4	= 72	= 6.69	x 6	= 432	= 12.22		
						1608	= 45.51	)

Tonnage to Mill:- 104.

Wages Paid £11. 4. 0.

Cost per Cu.M.:- 4/11.

COX VEIN S. OF H. RAISE IN TOP FLAT.2 $\frac{1}{2}$ \* GALENA.

L	H	S.F.	S.M.	W	C.F.	C.M.	
3	x 15	= 45	= 4.18	x 6	= 270	= 7.64	) @ Days Wages.

M. Short & Partner.

10 Days Worked.

Tonnage to Mill:- 18

Wages Paid £4. 0. 0.

Cost per Cu.M.:- 10/6.



## **NENTSBURY MINE & MILL FEBRUARY 1939**

NENTSBURY MINE. The working days for February were 26.

During February, work was confined to one shift in the Mine and one shift in the Mill. The Mine shift consisted of 8 hours daily. The Mill shift averaged 10 hours daily. During the month 1071 Tons of ore were mined and milled, of the 1071 Tons of Ore mined, 806 Tons of Ore was Mixed Ore, and 265 Tons was Lead ore.

The production from the 806 Tons of Mixed Ore was 352.75 Tons of Mixed Concentrates, equals 43.76%. The percentage recovery from the 1071 Tons mined, consisting of Mixed and Lead ores, but not including the 50 Tons of Mixed Concentrates produced from Stock Middlings, was 32.93%. Galena Concentrates recovered amounted to 31.30 Tons, of this quantity, 11.05 Tons was recovered from 806 Tons of Mixed Ore mined, equal to 1.37% and the balance, 20.25 Tons, was recovered from 265 Tons of Lead Ore mined, equal to 7.64%. The average percentage of Lead Concentrates recovered from the 1071 Tons mined was 2.92%.

Samples of the three grades of Mixed Concentrates produced, have been sent to Belgium to be assayed.

It will be noticed that 150 Tons of Stock Middlings were treated in the Mill, and 50 Tons of Mixed Concentrates produced. The percentage might appear low, but it will increase when we get into the richer part of the Middling heaps. To treat this 150 Tons a quantity of Mixed Ore broken during the month remains in the working places.

The sole object of producing Galena Concentrates the last week of the month was to produce as much revenue as possible, after producing the full quantity of Mixed concentrates for Messrs. Allen Ltd. The V.M. Co. has so far produced, and delivered, to Messrs. Allen Ltd., the quantity of Mixed Concentrates estimated. It now remains for Messrs. Allen Ltd., to hand over the zinciferous residue in quantity and value estimated by them on an agreed analysis.

During March, after the week ending March 4th, the mine will be closed except for maintenance, and the Mill runs two shifts to treat Stock Middlings only.

POTTERS ORE. Sales of Potters Ore improved and over 70 Tons were dispatched for sale.

GRAVEL SALES. Delivery was held up owing to weather conditions. Orders for Stone and Gravel in hand, at the end of the month was 700 Tons.

MILL. The Mill ran full time with satisfactory results.

The new Factory Act which came into force July 1<sup>st</sup> 1938, compelled the owners of Air Receivers to have these tested and fitted with an inspection door. We were compelled to have the Air Receiver at Nentsbury fitted with a door at a cost of £6 odd. The receiver is now in good order, and has been inspected, passed and insured.



RODDERUP FELL MINE.							
FEBRUARY 1939.							
DEVELOPMENT FOOTAGE :- Nil.							
Len Bell & Partners (5 men).				61 Days Worked.			
<u>D.44</u>	L	W	S.F.	S.M.	H	C.F.	C.M. )
	15 x 20	-	300	-	27.87 x 4	-	1200 - 33.98 )
	12 x 20	-	240	-	22.30 x 4	-	960 - 27.17 ) @ Days Wages
						2160	- 61.15 )
<u>F.50</u>	20 x 20	-	400	-	37.16 x 3.25	1300	- 36.81 ) @ Days Wages.
Tonnage to Mill:- 197.							
Wages Paid <del>XXXXXXXXXX</del>							
	227. 9. 6.			Cost per Cu.M.:- 5/7.			

### RODDERUP FELL FEBRUARY 1939

Instructions were received from Mr. Chaplain on January 28th, that the General Manager had authorized our making a four months trial of working Rodderup on a small scale, as proposed in my note to Mr. Chaplain dated Janry. 3<sup>rd</sup>.

Work was commenced on the small scale referred to, the week following. In all 8 people were employed full time, and one man part time.

The production for the month amounted to 197 Tone of Ore mined and milled.

Concentrates produced amounted to 18.34 Tons. The average percentage of recovery was 9.31%

I have to point out that we shall not be able to make a comparative statement of costs per metre and per ton, etc., with a close degree of accuracy, or one that can be compared with the cost for 1938. Our method of working is as follows: - The miners break ore underground, and fill it and tram it to the main level. It is then drawn to the Mill. When the Mill hopper is full, and water is available, the miners are employed in the Mill with the Washing Master and his assistant to work the Mill until the ore is crushed. Our object at present is not to produce (necessarily) low costs per ton of ore or cubic metre, but rather to produce a ton of Concentrates at the lowest cost possible.

If water is available during March, the output of Concentrates during the month, should be equal to what was produced in February. It is probable that if water is available the production of concentrates will exceed my monthly estimate submitted Janry. 3<sup>rd</sup>, of 17.75 Tons.

No electric power was used during February.



## Report on Nenthead Mines March 1939

### REPORT ON THE NENTHEAD MINES.

MARCH 1939.

	<u>Nentsbury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Totals.</u>
Ore Mined	187 Tons	One Steam Engine	228 Tons	415 Tons.
Ore Milled	1248 Tons (includes 1061 Tons Stock Middlings)	ran 8 hrs. daily for 38 days.	228 Tons	1476 Tons.
Lead Concs. pred.	6.6 Tons	One Fuel Oil Engine	24.60 Tons	31.20 Tons.
% of Galena	0.53%	ran occasionally	10.79%	N. R. 0.53 10.79
Mxd. Concs. pred.	782.7 Tons		-	782.7 Tons
% of Mxd. Concs.	62.71 %		-	62.71% (N) N. R.
Hours Worked	320 hours.		41 hours.	320 41
Tons per hour	3.9 Tons		5.56 Tons	3.9 5.56

#### STOCKS.

	<u>N'bury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Wellhope.</u>	<u>Totals.</u>
Crude Ore	Nil.	Nil.	Nil.	2300 Tons	2300 Tons.
Blende-Witherite	164 Tons	Nil.	150 Tons.	Nil.	314 Tons.

Rough Blende - Nil.  
Fine Blende - Nil.

Galena at Nentsbury, 34.20 Tons: Potters Ore at Nentsbury, 21.15 Tons  
Galena at Rodderup, 9.39 Tons: Potters Ore at Rodderup, 32.851 " .

Coal	consumed at Rampgill,	7 Tons.
Fuel Oil	" " "	3 Tons.
" "	" " Nentsbury,	4 Tons.
" "	" " Rodderup,	Nil.

After the first week of the month, the COMPRESSED AIR produced, was by Water Power only. The pressure for Drill Sharpening etc., was 80 lbs. per square inch.

At Rodderup, COMPRESSED AIR was produced by Water Power only, using the Hydro-Compressor, and the old Sandycroft. Pressure 80 lbs per square inch.

N-7

Month of March 1959.											
Salem Value			Blaine Value			Blaine Value			Blaine Value		
Previous Month's S.R.	bu. ft	Price	Previous Month's S.R.	bu. ft	Price	Previous Month's S.R.	bu. ft	Price	Previous Month's S.R.	bu. ft	Price
1st of March	-	-	15	200	29.17	15	200	29.17	15	200	29.17
2nd of March	-	-	29.17	550.61	-	29.17	550.61	-	29.17	550.61	-
3rd of March	-	-	-	-	-	-	-	-	-	-	-
4th of March	-	-	-	-	-	-	-	-	-	-	-
5th of March	-	-	-	-	-	-	-	-	-	-	-
6th of March	-	-	-	-	-	-	-	-	-	-	-
7th of March	-	-	-	-	-	-	-	-	-	-	-
8th of March	-	-	-	-	-	-	-	-	-	-	-
9th of March	-	-	-	-	-	-	-	-	-	-	-
10th of March	-	-	-	-	-	-	-	-	-	-	-
11th of March	-	-	-	-	-	-	-	-	-	-	-
12th of March	-	-	-	-	-	-	-	-	-	-	-
13th of March	-	-	-	-	-	-	-	-	-	-	-
14th of March	-	-	-	-	-	-	-	-	-	-	-
15th of March	-	-	-	-	-	-	-	-	-	-	-
16th of March	-	-	-	-	-	-	-	-	-	-	-
17th of March	-	-	-	-	-	-	-	-	-	-	-
18th of March	-	-	-	-	-	-	-	-	-	-	-
19th of March	-	-	-	-	-	-	-	-	-	-	-
20th of March	-	-	-	-	-	-	-	-	-	-	-
21st of March	-	-	-	-	-	-	-	-	-	-	-
22nd of March	-	-	-	-	-	-	-	-	-	-	-
23rd of March	-	-	-	-	-	-	-	-	-	-	-
24th of March	-	-	-	-	-	-	-	-	-	-	-
25th of March	-	-	-	-	-	-	-	-	-	-	-
26th of March	-	-	-	-	-	-	-	-	-	-	-
27th of March	-	-	-	-	-	-	-	-	-	-	-
28th of March	-	-	-	-	-	-	-	-	-	-	-
29th of March	-	-	-	-	-	-	-	-	-	-	-
30th of March	-	-	-	-	-	-	-	-	-	-	-
31st of March	-	-	-	-	-	-	-	-	-	-	-

## **NENTSBURY MINE & MILL MARCH 1939**

NENTSBURY MINE. The working days for March were 24.

On March 4th, the mine was closed, and the miners paid off. The quantity of ore mined was 187 Tons, and was one week's result, one shift only. The ore broken was mixed ore and contained only a small percentage of Galena. Since March 4th two miners have been employed in the mine daily, to maintain the levels and shaft.

A small quantity of Lead Ore was left in the working places in the mine, and in some of the rises. This ore will be cleaned up and sent to the mill, to be crushed before the mill is closed on April 6th.

NENTSBURY MILL. In addition to the 187 Tons of Mixed Ore crushed and washed, 1061 Tons of Stock Middlings, containing Witherite and Blende and traces of Galena, were washed. The quantity of Mixed Concentrates produced from the 187 Tons of mine ore and the 1061 Tons of Middlings, totalling 1248 Tons, was 782.7 Tons. There was also produced 6.6 Tons of Galena Concentrates. The total quantity of Mixed Concentrates produced in January, February and March, amounted to 1561.45 Tons. The quantity delivered to Stockton during this period amounted to 1405.725 Tons of Mixed Concentrates. At the end of March, when deliveries were suspended, the stock in hand was 155.725 Tons.

There is also in stock, 317 Tons of Blende-Witherite Middlings, of which, about 150 Tons of Blende Middlings are at Rodderup. These contain only a small percentage of  $\text{BaCO}_3$ .

The balance of the Witherite Middlings will be washed, and the Mixed Concentrates stored before the Mill close on April 6th.

POTTERS ORE. No Potters Ore was despatched during March.

GRAVEL SALES. The sale of Gravel & Stones, improved during the month. The quantity delivered amounted to 375.75 Tons.

RODDERUP FELL MINE.  
 1939

MARCH 1939.

DEVELOPMENT FOOTAGE:- N 1 1.

D. 41.

T. Bushby & Partners.

88 Days Worked.

L	W	S.F.	S.M.	H.	C.F.	C.M.	)
31	x 16	- 496	- 46.07	x 5	- 2480	- 70.21	)
9	x 18	- 162	- 16.00	x 6	- 972	- 27.51	)
12	x 6	- 72	- 6.68	x 10	- 720	- 20.88	)
20	x 16	- 320	- 29.71	x 5	- 1600	- 45.30	)
						<u>5772</u>	- <u>163.40</u> )

@ Days Wages.

Wages paid:- £40. 18. 5.

Cost per Cu.M.:- 5/-

Tons to Mill:- 228.

**RODDERUP FELL  
MARCH 1939**

During March 228 Tons of Ore was mined from the richest ore near the foot of the Incline. The Ore was carefully picked, crushed and washed. Concentrates produced amounted to 24.60 Tons. The percentage of recovery was 10.79%. The miners work 5 days a week in the mine, and then go to the mill one day a week, to help the washing master and his assistant to crush and wash the ore. Power for milling, washing, and Compressed Air, is produced by Water Power. Fortunately, the season has been a wet one, and water plentiful.

We can maintain the output at about the present quantity, for some months, if water is available. It will be understood that we are mining the easiest richest ore we can to produce a ton of concentrates at the lowest cost. The water-course and Reservoirs are maintained in good condition, as is also the Mine and mine machinery.





## Report on the Nenthead Mines April 1939

### REPORT OF THE NENTHEAD MINES.

APRIL 1939

	<u>Nentsbury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Total.</u>
Ore Mined	216 Tons.	Machinery idle.	230 Tons.	446 Tons.
Ore Milled	533 "		230 "	763 "
	(Includes 317 Tons Stock Middlings)			
Lead Concs. produced	24.40 Tons		26.55 "	50.95 "
% Galena	11.3%		11.54%	11.3% 11.54%
	(Includes Cleaning of Concs. Tanks)			
M'xd Concs. produced	236.00 Tons		-	236.00 Tons.
% of M'xd Concs.	74.4%		-	74.4%
Hours Worked	133 Hours.		41 Hours	133 41
Tons per Hour	4 Tons		5.61 Tons	4.0 5.61

#### STOCKS.

	<u>N'bury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Wellhope.</u>	<u>Totals.</u>
Crude Ore	Nil	Nil	Nil.	2300 Tons	2300 Tons.
Blende-Witherite	Nil	Nil	150 Tons.	Nil	150 " .
			(Mainly Blende content)		

Rough Blende - Nil.

Fine Blende - Nil.

Re-washed Mixed Concentrates in Stock - 391.725 Tons.

Galena at Nentsbury, 58.60 Tons: Potters Ore at Nentsbury, 10.750 Tons.  
Galena at Rodderup, 15.49 Tons: Potters Ore at Rodderup, 36.051 Tons.

Coal	consumed at	Rampgill,	Nil.
Fuel Oil	"	"	Nil.
"	"	" Nentsbury,	2 Tons.
"	"	" Rodderup,	Nil.

No COMPRESSED AIR was produced at Nenthead.

COMPRESSED AIR produced at Rodderup was by water power only.  
Pressure in Mine, 80 lbs. per square inch.

## **NENTSBURY MINE & MILL**

### **APRIL 1939**

NENTSBURY MINE. The mine was closed end of March except for daily inspection and maintenance. The 216 Tons brought out of the mine was ore left when the mine ceased working. This with the cleaning up of the concentrate tanks, and a small quantity extracted from re-washing the Middlings yielded 24.40 Tons of Galena. The percentage recovery of 11.30% was not the value of the ore from the mine, but included what was recovered from the residues taken from the tanks.

NENTSBURY MILL. In addition to the 216 Tons of Ore from the Mine which was crushed and washed, 317 Tons of Middlings were re-washed. Mixed Concentrates produced amounted to 236 Tons. There were no deliveries of Mixed Concentrates to Stockton. The stock of Middlings at Nentsbury and Rampgill, except for a few tons of dirty material, is re-washed. There is a quantity of Middlings estimated to amount to 150 Tons, at Rodderup, mainly containing Blende. This is a bonus - the book figures are exhausted.

POTTERS ORE. Twenty-Five Tons of Potters ore was dispatched to Belgium early in the month and a further thirty Tons will be dispatched later.

GRAVEL SALES. Sales of Stone and Gravel are improving.

RODDERUP FELL MINE - APRIL 1939.

DEVELOPMENT FOOTAGE :- Nil.

T. Bushby & Partners.

87 Days Worked.

	L	W	S.F.	S.M.	H	C.F.	C.M.	
	15	x 14	- 210	- 19.51	x 5	- 1050	- 29.72	)
	13	x 14	- 182	- 16.92	x 5	- 910	- 25.76	)
	16	x 6	- 96	- 8.92	x 5	- 480	- 13.58	)
	23	x 22	- 506	- 46.99	x 5	- 2530	- 71.63	) @ Days Wages
	6	x 18	- 108	- 10.04	x 5	- 540	- 15.29	)
Rise	7	x 5	- 35	- 3.25	x 9	- 315	- 8.91	)
						5825	-164.89	)

Tons to Mill:- 230 Tons.

Wages Paid £39. 17. 8d.

Cost per Cu. M. :- 4/10.

**RODDERUP MINE & MILL  
APRIL 1939**

MINE. During April 250 Tons were mined and crushed, for a recovery of 26.55 Tons of Galena Concentrates.

The percentage recovery was 11.54% Galena.

We are mining near the bottom of the Incline, and from a Flat developed on the Vein W. of the terminus of the Incline. These two places continue to yield good ore after very fine picking. Really the percentage recovered cannot be regarded as the average grade of ore in the mine. It is however encouraging to report that the seam near the Vein appears likely to yield some hundreds of tons of ore above the average grade, and when picked should yield between 9 & 11%

Air production is from Water Power.

Water-courses are maintained and the mine kept un-watered.

1059	•	1059	MSH	•	MSH	2.616	•	2.616	3M1	•	1146	•	MS7	•	MS7	3.10	3.10	1.92	1.92	2.17	0.92	81	•	81	7/7 <sup>1/2</sup>	7/7 <sup>1/2</sup>	811	811	3.76	9.5	1133	1.07
2.30	•	230	105	•	105	1.39	•	1.39	87	•	13	•	100	•	100	2.104	2.104	1.90	1.90	2.30	1.65	912	•	912	911	911	510	510	511	3	146	0.88
2.12	•	212	150	•	150	1.70	•	1.70	75	•	8	•	89	•	89	2.89	2.89	1.72	1.72	2.64	1.56	912	•	912	911	911	519	519	519	3	95	1.44
2.15	•	215	1M1	•	1M1	1.80	•	1.80	79	•	10	•	89	•	89	2.81	2.81	1.78	1.78	2.53	1.69	912	•	912	911	911	516	516	516	3	112	0.59

— — —

1113 617  
 215 617  
 1113 617  
 105 617  
 105 617  
 105 617

2  
 —  
 613

## REPORT ON THE NENTHEAD MINES.

M A Y      1 9 3 9.

	<u>Nentsbury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Totals.</u>
Ore Mined	Nil.	Machinery	231 Tons	231 Tons
Ore Milled	Mine and Mill closed except for inspection and Maintenance.	Greased & Inspected periodic- ally.	231 "	231 "
Lead Concs. produced			26.05 "	26.05 "
% Recovered			11.27%	11.27%
Hours Worked			41 hours	41 hours
Tons per hour			5.63	5.63

S T O C K S.

	<u>N&amp;bury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Wellhope.</u>	<u>Totals.</u>
Crude Ore	Nil.	Nil.	Nil.	2300	2300 Tons.
Blende-Witherite	Nil.	Nil.	150.	Nil.	150 "

Also in Stock, 391.725 Tons of Rewashed Middlings.

Rough Blende: Nil.  
Fine Blende : Nil.

Galena at Nentsbury, 58.60 Tons; Potters Ore at Nentsbury, 10.75 Tons.  
Galena at Rodderup, 18.94 Tons; Potters Ore at Rodderup, 58.651 Tons.

Coal	consumed at	Rampgill,	Nil.
Fuel Oil	"	"	Nil.
"	"	Nentsbury,	Nil..
"	"	Rodderup,	Nil.

NO COMPRESSED AIR produced at Nenthead.

COMPRESSED AIR produced at Rodderup from water.

## NENTSBURY MINE & MILL MAY 1939

Nentsbury Mine & Mill were closed April 6<sup>th</sup>.  
Since that date, they have been inspected frequently and generally maintained.

The same applies to Rampgill Mill and Washing plant. With a limited staff, who are doing all they can to maintain the mine workings, there is a certain amount of depreciation. So far no heavy falls of ground have occurred.

POTTERS ORE. No sales have been made during May.

GRAVEL. The sales of Gravel have increased and we have disposed of 449 Tons. Profit therefrom after paying all costs of transport and commission amounted to £72.55. The outlook for June for Gravel sales is fair.

RODDERUP FELL MINE - MAY 1939.

DEVELOPMENT FOOTAGE:- NIL.

---

T. Bushby & Partners.

89½ Days Worked.

L	W	S.F.	S.M.	H	C.F.	C.M.	)
6 x 15	-	90	-	8.36 x 5	-	450	- 12.73 )
11 x 14	-	154	-	14.30 x 5	-	770	- 21.80 )
16 x 11	-	176	-	16.35 x 5	-	880	- 24.91 )
10 x 15	-	150	-	13.93 x 5	-	750	- 21.23 )
16 x 20	-	320	-	29.72 x 5	-	<u>1600</u>	- <u>45.30</u> )
						<u>4450</u>	- <u>125.97</u> )

@ Days Wages

Tons to Mill:- 231

Wages Paid:- £40. 3. 9.

Cost per Cu.M.:- 6s/4d.

---

## RODDERUP FELL MAY 1939

During May 231 Tons of Ore was mined and milled.  
Concentrates recovered amounted to 26.05 Tons. The percentage recovery was 11.27%.

There is nothing of importance to report respecting Rodderup Mine. The Ore mined is above the average grade of Ore deposit in the Flats, and is specially selected to produce as much as possible and to help to meet the cost of maintenance. The mine is kept unwatered and generally maintained. The cost of maintenance is included in the working costs. All Compressed Air produced so far, has been from water power.

Meaning 14 204

2	1059	-	1059	45M.	-	45M	250	-	250	3H1	-	110	-	107	-	107	310	310	132	132	2.17	0.92	81-	-	81-	77 1/2	77 1/2	81 1/2	81 1/2	57 1/2	95	103	1.07
3	231	-	231	191	-	121	180	-	180	89	-	11	-	103	-	103	2.60	2.60	1.42	1.42	2.24	1.22	91-	-	91-	89	89	72	72	311	3	131	0.55
4	218	-	218	141	-	141	160	-	160	79	-	10	-	89	-	89	2.81	2.81	1.78	1.78	2.53	1.59	912	-	912	91-	91-	58	58	318	3	131	0.55
5	221	-	221	137	-	137	105	-	105	81	-	11	-	92	-	92	2.70	2.70	1.69	1.69	2.40	1.50	91 1/2	-	91 1/2	81 1/2	81 1/2	60 1/2	60 1/2	319	3	131	0.57

1.  
1.  
1.

510	113	-	98	61-
502	117	-	103	510
		-	105	510
		-	120	72

2

Note - The cost per cubic meter will vary higher than usual. The cost will vary occasionally especially when the 26' is the end of one statistical unit. One occurs in the middle of the week. One before during that week or not always. One after. Measurements however late are correct. The meter and AT



## Report on the Nenthead Mines June 1939

### REPORT ON THE NENTHEAD MINES. ~~~~~

JUNE 1939.

	<u>Nentsbury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Totals.</u>
Ore Mined	Nil.	Machinery greased and	212 Tons	212 Tons.
Ore Milled	Nil.	kept in good con- dition.	212 Tons	212 Tons.
Lead Concs. produced	Closed except for inspection and maintenance.		24.75 Tons	24.75 Tons.
% Recovered			11.67 %	11.67 %
Hours Worked			38 hours	38 hours.
Tons per hour			5.58 Tons	5.58 Tons.

### S T O C K S.

	<u>N'bury.</u>	<u>Rampgill.</u>	<u>Rodderup.</u>	<u>Wellhope.</u>	<u>Totals.</u>
Crude Ore	Nil.	Nil.	Nil.	2300	2300 Tons.
Blende-Witherite	Nil.	Nil.	150.	Nil.	150 "

In Stock, 391.725 Tons Re-Washed Middlings.  
 ~~~~~

Rough Blende - Nil.  
 Fine Blende - Nil.

Galena at Nentsbury, 58.60 Tons; Potters Ore at Nentsbury, 10.000 Tons.  
 Galena at Rodderup, 24.09 Tons; Potters Ore at Nentsbury, 49.051 Tons.

|          |                       |        |
|----------|-----------------------|--------|
| Coal,    | consumed at Rampgill, | Nil.   |
| Fuel Oil | " "                   | Nil.   |
| " "      | " Nentsbury,          | Nil.   |
| " "      | " Rodderup,           | 1 Ton. |

NO COMPRESSED AIR produced at Nenthead.

COMPRESSED AIR produced at Rodderup from Water power. Two days the Mill ran with the Fuel Oil Engine owing to drought.

119

## NENTSBURY MINE & MILL JUNE 1939

Except for inspection and maintenance on alternate days, the Mine and Mill remained closed. The same applies to Rampgill, Perry Dam, Middlecleugh, and watercourses.

POTTERS ORE. During the month 30 Tons of Potters Ore was sent to Belgium.

GRAVEL. The sales of Cuttings and Stones have been well maintained. Sales from Rodderup & Nentsbury amounted to 543.80 Tons, Profit (nett) amounted to £82. 0. 2. The outlook for the sale of Cuttings is fair.

RODDERUP FELL MINE - JUNE 1939.

DEVELOPMENT FOOTAGE:- N I L.

| <u>T. Bushby &amp; Partners.</u>                           | <u>No.3 Flat (West Central)</u> | <u>104 Days Worked.</u> |
|------------------------------------------------------------|---------------------------------|-------------------------|
| L      W      S.F.    S.M.      H      C.F.      C.M.    ) |                                 |                         |
| 16 x 11 - 176 - 16.35 x 5 -                                | 880 - 24.92                     | )                       |
| 15 x 12 - 180 - 16.72 x 5 -                                | 900 - 25.48                     | )                       |
| 8 x 12 - 96 - 8.92 x 5 -                                   | 480 - 13.59                     | ) @ Days Wages.         |
| 7 x 6 - 42 - 3.90 x 5 -                                    | 210 - 5.94                      | )                       |
| 18 x 20 - 360 - 33.44 x 5 -                                | <u>1800 - 50.97</u>             | )                       |
|                                                            |                                 | )                       |
|                                                            | <u>4270 - 120.90</u>            | )                       |

Tons to Mill:- 212

Wages Paid:- £46: 3: 5.

Cost per Cu.M.:- 7s/8d.

## RODDERUP FELL JUNE 1939

During June the quantity of Ore mined was 212 Tons. Concentrates produced amounted to 24.75 Tons. The percentage recovery was 11.67%. There is nothing of importance to report re: the working of Rodderup. Mining is confined to three places where the ore is richest. The mine is maintained, and kept unwatered, and all the machinery is kept in good order.



## Report of the Nenthead Mines July 1939

### R E P O R T    O F    T H E    N E N T H E A D    M I N E S

J U L Y            1 9 3 9

|                      | <u>Nentsbury.</u> | <u>Rampgill.</u>  | <u>Rodderup.</u> | <u>Totals.</u> |
|----------------------|-------------------|-------------------|------------------|----------------|
| Ore Mined.           | Nil.              | Machinery kept in | 217 Tons         | 217 Tons       |
| Ore Milled           | Nil.              | fair condition.   | 217 Tons         | 217 Tons       |
| Lead Conc.s Produced | Mine Closed       |                   | 24.10 Tons       | 24.10 Tons     |
| % Recovered          | Nil.              |                   | 11.12%           | 11.12%         |
| Hours Worked         |                   |                   | 40 hours         | 40 hours       |
| Tons per hour        |                   |                   | 5.425 Tons       | 5.425 Tons.    |

### S T O C K S .

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.             | 2300             | 2300 Tons      |
| Blende-Witherite | Nil.              | Nil.             | 150.             | Nil.             | 150 Tons       |

In Stock - 391.725 Tons Re-washed Middlings.

Rough Blende - Nil.  
Fine Blende - Nil.

Galena at Nentsbury, 58.60 Tons; Potters Ore at Nentsbury, 9.500 Tons.  
Galena at Rodderup, 28.64 Tons; Potters Ore at Rodderup, 58.571 Tons.

|           |                       |           |
|-----------|-----------------------|-----------|
| Coal,     | consumed at Rampgill, | Nil.      |
| Fuel Oil, | " " " "               | Nil.      |
| " " ,     | " " Nentsbury,        | Nil.      |
| " " ,     | " " Rodderup,         | 0.5 Tons. |

NO COMPRESSED AIR PRODUCED at Nenthead.

COMPRESSED AIR produced at Rodderup from Water Power. Pressure 80 lbs. per square inch.

## NENTSBURY MINE & MILL JULY 1939

The Mine and Mill are inspected on alternate days and kept in good condition. Inspection and maintenance of Rampgill, Perry Dam, and the Company's property, is carried out periodically.

POTTERS ORE. Only 10.5 Tons were sold during July.

GRAVEL. The total quantity of Gravel & Stones sold from Rodderup and Nentsbury during July amounted to 666.1 Tons. Profit therefrom amounted to £101. 2s. 3d. Nentsbury contributed 81.85 Tons. We have several orders to execute during August.

| RODDERUP MINE - JULY 1939.       |    |      |       |         |                         |        |         |          |       |
|----------------------------------|----|------|-------|---------|-------------------------|--------|---------|----------|-------|
| DEVELOPMENT FOOTAGE;- N I L.     |    |      |       |         |                         |        |         |          |       |
| <u>West Central Section.</u>     |    |      |       |         |                         |        |         |          |       |
| <u>T. Bushby &amp; Partners.</u> |    |      |       |         | <u>113 Days Worked.</u> |        |         |          |       |
|                                  | L  | W    | S.F.  | S.M.    | H.                      | C.F.   | C.M.    |          |       |
| No.3 Flat                        | 12 | x 14 | - 168 | - 15.60 | x 5                     | - 840  | - 23.78 |          |       |
| "                                | 13 | x 12 | - 156 | - 14.49 | x 5                     | - 780  | - 22.08 |          |       |
| Roof in No.3 Flat                | 22 | x 20 | - 440 | - 40.87 | x 5                     | - 2200 | - 62.29 |          |       |
| No.4 Flat                        | 11 | x 16 | - 176 | - 16.35 | x 5                     | - 880  | - 24.91 |          |       |
|                                  |    |      |       |         |                         |        | 4700    | - 133.06 | Wages |
| Tonnage to Mill:- 217            |    |      |       |         |                         |        |         |          |       |
| Wages Paid:- £49. 6s. Od.        |    |      |       |         | Cost per Cu.M.:- 7s/5d. |        |         |          |       |

## RODDERUP MINE & MILL JULY 1939

The quantity of ore mined and milled during July amounted to 217 Tons. Galena Concentrates recovered amounted to 24.10 Tons. The percentage of Galena recovered was 11.12% Galena per ton of ore.

Mining was confined to Nos. 3 & 4 Flats in the West Central Section. Values are much the same as for the past few months. The outlook is similar. The mine generally is maintained and kept unwatered. The machinery in the mine and mill is kept in good condition.



## Report on the Nenthead Mines August 1939

### REPORT ON THE NENTHEAD MINES 0000000000 00 000 000000000000 00000000

AUGUST 1939

|                      | <u>N'bury.</u> | <u>Rampgill.</u>  | <u>Rodderup.</u> | <u>Totals.</u> |
|----------------------|----------------|-------------------|------------------|----------------|
| Ore Mined            | Nil.           | Machinery kept in | 266 Tons.        | 266 Tons.      |
| Ore Milled           | Nil.           | fair condition.   | 266 "            | 266 "          |
| Lead Concs. produced | Mine Closed.   |                   | 29.85 Tons       | 29.85 Tons.    |
| % Recovered          | Nil.           |                   | 11.22%           | 11.22%         |
| Hours Worked         | Nil.           |                   | 51 hours         | 51 hours       |
| Tons per hour        | Nil.           |                   | 5.21 Tons        | 5.21 Tons.     |

#### STOCKS.

|                  | <u>N'bury.</u> | <u>R'gill.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|----------------|----------------|------------------|------------------|----------------|
| Crude Ore        | Nil.           | Nil.           | Nil.             | 2300 Tons        | 2300 Tons.     |
| Blende-Witherite | Nil.           | Nil.           | 150 Tons         | Nil.             | 150 Tons.      |

During August, up to the 26th, 289.637 Tons of Rewashed Middlings were delivered to Stockton. The Stock in hand, according to our books, is 102.088 Tons. The actual stock will exceed this quantity.

Rough Blende - Nil.

Fine Blende - Nil.

Galena at Nentsbury, 58.60 Tons. Potters Ore at Nentsbury, 9.500 Tons  
 Galena at Rodderup, 32.59 " . Potters Ore at Rodderup, 59.471 "

|          |                      |              |
|----------|----------------------|--------------|
| Coal     | consumed at Rampgill | - Nil.       |
| Fuel Oil | " " "                | - Nil.       |
| "        | " " Nentsbury        | - Nil.       |
| "        | " " Rodderup         | → 0.75 Tons. |

NO Compressed Air was produced at Nenthead.

COMPRESSED AIR produced at Rodderup was from Water Power augmented when necessary with the Fuel Oil Engine. Air Pressure 80 lbs. per square inch.



**NENTSBURY MINE & MILL**  
**AUGUST 1939**

The Mine and Mill are inspected periodically and kept in good condition. Inspection and maintenance of Rampgill, Perry Dam, and the Company's property, is carried out periodically.

POTTERS ORE. During the month 25 Tons of Potters Ore was dispatched to Belgium.

GRAVEL. The total quantity of Gravel sold from Rodderup and Nentsbury during August amounted to 608 Tons. Profit therefrom amounted to £92. 1s. 8d. Nentsbury contributed 45.1 Tons. Unless hampered by National Service, the outlook for sales during September is fair.

RODDERUP MINE - AUGUST 1939.

DEVELOPMENT FOOTAGE:- Nil.

West Flats.

T. Bushby & Partners.

152 Days Worked.

|           | L  | W    | S.F.  | S.M.    | H   | C.F.   | C.M.    | ) |       |
|-----------|----|------|-------|---------|-----|--------|---------|---|-------|
| No.3 N.   | 16 | x 14 | - 224 | - 20.81 | x 5 | - 1120 | - 31.71 | ) |       |
| No.3 Roof | 6  | x 12 | - 72  | - 6.69  | x 5 | - 360  | - 10.19 | ) | Days  |
| No.4 N.   | 15 | x 17 | - 255 | - 23.69 | x 5 | - 1275 | - 36.10 | ) | Wages |
| No.4 E.   | 15 | x 13 | - 195 | - 18.11 | x 5 | - 975  | - 27.61 | ) |       |
| No.4 Roof | 20 | x 20 | - 400 | - 37.16 | x 5 | - 2000 | - 56.63 | ) |       |
|           |    |      |       |         |     |        |         | ) |       |
|           |    |      |       |         |     | 5730   | -162.24 | ) |       |

Tonnage to Mill:- 266 Tons.

Wages Paid: £64: 17s: 6d.      Cost per Cu.M.:- 8s/-.

**RODDERUP MINE & MILL**  
**August 1939**

MINE. The quantity of ore mined and milled during August amounted to 266 Tons. Galena Concentrates produced amounted to 29.85 Tons. The percentage of Galena recovered was 11.22% per ton of ore.

About the middle of the month, 4 miners and two labourers, in addition to the staff we have previously employed, were engaged and working places in the Flats were put in order. During the last two weeks of August, the output from Rodderup amounted to 150 Tons of Crude Ore. Concentrates produced from the 150 Tons amounted to 16.85 Tons. The percentage of Galena recovered per ton of ore, was 11.23%. It is our object to endeavour to increase the output of ore, without lowering, subject to reasonable variation month by month, of the percentage of Galena in the ore mined. I consider with our present staff, we may expect to produce from 300 to 325 Tons of Crude Ore monthly and about 33 Tons of Concentrates.

The condition of the mine underground is unchanged from last month. We are continuing to work near the Cross Vein or fault, which crossed the Flats west of the Incline and Improved the mineralisation.

Mill. We have completely reconstructed one Wliffey Table which had not been working efficiently for some time, and for which we had to buy some spare parts, and get some made at a local foundry. The Mill is now in very good order.



## Report on the Nenthead Mines September 1939

REPORT ON THE NENTHEAD MINES.

S E P T E M B E R      1 9 3 9

|                   | <u>N'bury.</u> | <u>Rampgill.</u>  | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|----------------|-------------------|------------------|----------------|
| Ore Mined         | Nil.           | Machinery kept in | 329 Tons.        | 329 Tons.      |
| Ore Milled        | Nil.           | good condition as | 329 Tons         | 329 Tons.      |
| Lead Concs. prod. | Nil            | far as possible.  | 35.50 "          | 35.50 "        |
| % Recovered       | Mine Closed    |                   | 10.79%           | 10.79%         |
| Hours Worked      |                |                   | 58 Hours         | 58 Hours       |
| Tons per hour     |                |                   | 5.67             | 5.67           |

## STOCKS.

|                  | <u>N'bury.</u>    | <u>R'gill.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|----------------|------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.           | Nil.             | 2300 Tons.       | 2300 Tons.     |
| Blende-Witherite | 50 Tons(unwashed) |                | 150              | -                | 200 "          |

The quantity of Mixed Concentrates delivered to Stockton exceeded the book stock figure by 15.287 Tons. There is as shewn above, under Nentsbury, 50 Tons (about) Unwashed Middlings in stock.

Rough Blende - Nil.  
Fine Blende - Nil.

Galena at Nentsbury, 58.60 Tons; Potters Ore at Nentsbury, 9.500 Tons.  
Galena at Rodderup, 36.59 Tons; Potters Ore at Rodderup, 90.471 Tons.

|          |                       |           |
|----------|-----------------------|-----------|
| Coal     | consumed at Rampgill, | Mil.      |
| Fuel Oil | " " "                 | Mil.      |
| " "      | " " Nentsbury,        | Mil.      |
| " "      | " " Rodderup,         | 0.8 Tons. |

COMPRESSED AIR at 85 lbs pressure was produced at Rodderup by Water Power, except when the Water Supply was insufficient to work both Compressors and Mill.

NO COMPRESSED AIR produced at Nenthead.

## **NENTSBURY MINE & MILL SEPTEMBER 1939**

Nentsbury Mine and Mill and Rampgill, Perry Dam, and Buildings etc., are all inspected periodically and kept in good condition. There is, of course, slight deterioration of some things, but nothing of vital importance.

POTTERS ORE. Owing to the declaration of war, no ore can be exported without a permit - consequently no ore has been sold. The price is also controlled and, at present, Empire and British Lead is quoted at approx. £17.5 per ton.

GRAVEL. During the month, no gravel was sold from Nentsbury. We have only 200 to 300 Tons in stock, and this we are keeping for delivery when an order is placed for short distances.

SAMPLING HILLERSDON TERRACE HEAPS. Acting on instructions we have been sampling these heaps during the month and should complete the sampling about mid-October. I must again point out that not being able to obtain a suitable boring tool for boring from top to bottom of the heaps, we have done the best we could by sinking pits at intervals to as great a depth as possible, and digging in the sides of the heaps and down the sides, also at intervals. It is the best we could do under the circumstances. This method is not as reliable as if we were able to bore from top to bottom, and take a quantity from the middle of the heaps. The results of the samples will indicate the values contained, but must not be regarded as truly representative.

### DEVELOPMENT IN THE FIRESTONE STRATUM IN WELLHOPE SHAFT.

On the 25th September, we received a letter from Head Office instructing us to prepare the drive from the Shaft in the Firestone Stratum to the N. & S. Veins, at the Company's expense. Before we can do anything in the Shaft we must fix new winding ropes. By law, ropes used for raising and lowering men can only be used for a specified time. Ropes were ordered immediately at a cost of about £30., and promised in 21 days. In the meantime, we are preparing Timber for erecting a platform in the shaft, and testing the Compressed Air Pipe Lines. To get the ropes, prepare and erect a platform, remove Brick-work in the side of the Shaft to start off with the Level, which must be started from where the cages are fixed, will take a few weeks after the 21 days for the ropes to be delivered. We will proceed with this work as fast as possible.

RODDERUP FELL MINE.

SEPTEMBER 1939.

DEVELOPMENT FOOTAGE :- **NIL.**

West Central Flats.

T. Bushby & Partners.

180 Days Worked.

|             | L  | W    | S.F.  | S.M.    | H    | C.F.   | C.M.     |          |
|-------------|----|------|-------|---------|------|--------|----------|----------|
| No. 3 Flat. | 21 | x 13 | - 273 | - 25.36 | x 5  | - 1365 | - 38.65  | )        |
| " " "       | 7  | x 12 | - 84  | - 7.80  | x 5  | - 420  | - 11.89  | )        |
| " " Roof.   | 9  | x 20 | - 180 | - 16.72 | x 5  | - 900  | - 25.48  | )        |
| " " Pillar. | 6  | x 11 | - 66  | - 6.13  | x 10 | - 660  | - 18.69  | )        |
| " " "       | 9  | x 10 | - 90  | - 8.36  | x 6  | - 540  | - 15.29  | ) @ Days |
| No. 4 Flat. | 11 | x 18 | - 198 | - 18.39 | x 5  | - 990  | - 28.03  | ) Wages  |
| " " "       | 13 | x 17 | - 221 | - 20.53 | x 5  | - 1105 | - 31.29  | )        |
| " " "       | 12 | x 18 | - 216 | - 20.06 | x 5  | - 1080 | - 30.58  | )        |
|             |    |      |       |         |      | 7060   | - 199.90 | )        |

Tonnage to Mill:- 329 Tons.

Wages Paid:- £76: 4: 0d.

Cost per Cu.M.:- 7s/7½d.

**RODDERUP FELL MINE & MILL  
SEPTEMBER 1939**

MINE. During the month 329 Tons of Ore was mined and crushed. Galena Concentrates produced amounted to 35.50 Tons.

The percentage recovery was 10.79%.

This is the first complete month's output from the additional miners employed, and both output of ore, output of concentrates, and percentage recovered, slightly exceeded the estimates submitted. The outlook for October should be similar, if the water supply is sufficient.

The ore in the Flats, after carefully picking, is likely to yield about the same grade for some time. We are working mainly, the top portion of the Limestone and, occasionally, owing to the throw-down of the ore, have to work down to the middle or bottom of the Limestone.

You will appreciate that with no big blocks of ore developed, it is impossible to closely estimate in advance what the quantity or grade will be on a large scale. It does however, appear now, that we can mine the present quantity at about the same grade for some months, and if the price of Lead improves to about £20 per ton, we might consider working sufficient to supply the Mill day-shift only. We have to watch carefully, the probability of higher costs of wages and materials. At present, we are meeting with no difficulty. The cost however, of iron and steel goods has increased from 10 to 15%. The situation is watched carefully from day to day.

MILL. In good condition.

[illegible]

|     |     |     |     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 210 | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 |
| 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 |
| 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 |
| 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 |
| 145 | 146 | 147 | 148 | 149 | 150 | 151 | 152 | 153 | 154 | 155 |
| 156 | 157 | 158 | 159 | 160 | 161 | 162 | 163 | 164 | 165 | 166 |
| 167 | 168 | 169 | 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 |
| 178 | 179 | 180 | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 |
| 189 | 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 |
| 200 | 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 |



# Report of the Nenthead Mines October 1939

## REPORT OF THE NENTHEAD MINES

OCTOBER 1939.

|                    | <u>Nentsbury.</u> | <u>Rampgill.</u>  | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------|-------------------|-------------------|------------------|----------------|
| Ore Mined          | Nil.              | Machinery kept in | 396 Tons         | 396 Tons.      |
| Ore Milled         | Nil.              | fair condition.   | 396 "            | 396 "          |
| Lead Concs. prdcd. | Nil.              |                   | 42.75 "          | 42.75 "        |
| % Recovered        | Mine closed.      |                   | 10.79%           | 10.79%         |
| Hours Worked       | Nil.              |                   | 69 hours.        | 69 hours.      |
| Tons per hour      | Nil.              |                   | 5.76             | 5.76           |

### STOCKS.

|                             | <u>N'bury.</u> | <u>R'gill.</u> | <u>Rodderup.</u>         | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------------------------|----------------|----------------|--------------------------|------------------|----------------|
| Crude Ore.                  | Nil.           | Nil.           | Nil.                     | 2300 Tons        | 2300 Tons      |
| Blende-Witherite (Unwashed) | 50 Tons        | Nil.           | 150 Tons (Mostly Blende) | Nil.             | 200 Tons.      |

Rough Blende:- Nil.

Fine Blende:- Nil.

Galena at Nentsbury, 58.60 Tons; Potters Ore at Nentsbury, 9.500 Tons  
Galena at Rodderup, 40.14 Tons; Potters Ore at Rodderup, 129.671 Tons

|          |                       |         |
|----------|-----------------------|---------|
| Coal     | consumed at Rampgill, | 3 Tons. |
| Fuel Oil | " " " ,               | 1 "     |
| " "      | " " Nentsbury,        | Nil.    |
| " "      | " " Rodderup,         | 1 Ton.  |

COMPRESSED AIR at 85 lbs. pressure produced at Rodderup, mainly from Water Power. Occasionally when Water is not sufficient, the Fuel Oil Engine operates for short periods.

No COMPRESSED AIR, except for testing the pipe-line, has been produced at Nenthead.

## **NENTSBURY MINE & MILL OCTOBER 1939**

Except for preparations re: the Development in the Firestone Stratum in Wellhope Shaft, the Mine and Mill have remained closed. Generally, both have been maintained in fair condition. A certain amount of deterioration is taking place but nothing of great importance.

### **DEVELOPMENT IN THE FIRESTONE STRATUM.**

Preparatory work has been continued during the month, and, as explained in a resume of the work done in a letter sent October 24th, part of the men's time was occupied in repairing the Compressed Air pipe-line, and removing Winches, Pipes, Wire Ropes and Rails. The pipes in one section of the line burst in several places when air was turned on and the pressure rose. We have repaired these, and maintained the pressure for some hours at 90 lbs per square inch at Nenthead, which gave about 80 lbs per square inch at Wellhope. The unfortunate position re: the Pipes, is that most of them are from 2 to 3 feet below ground, and when one bursts, particularly in Winter, it is not easy to find. The Wire Ropes were delivered Oct. 31st, and will be fixed during the first week of November. We are also erecting a temporary Wood Headgear, and shall use an Air Winch and a Kibble to enable driving the E. level to commence as soon as the platform is fixed in the Shaft. All being well work in the level will commence about mid-November, and if the Air Pipe-line stands up, we should cut the first Vein before the end of this year, provided, of course, the Vein is where we expect it to be.

**POTTERS ORE.** No sales, and no sales of Lead Ore. There is no free market for Lead Ore in this country.

**SAMPLING HILLERSDON HEAPS.** A report and Sketch Plan, with Dr. Michie's results of analyses of samples was posted October 19th.

**GRAVEL SALES.** During the month, we sold a total of 256.05 Tons. Profit therefrom amounted to £45. 12. 1d. Nentsbury contributed 4 Tons only. Practically all road-work has been stopped, and any sales during the Winter months will, in all probability, be obtained from contractors on Government Work.

**WITHERITE-BLENDE.** All details re: the Blende-Witherite product at Stockton, have been sent you when received. There is nothing to report since I last wrote you.

RODDERUP FELL MINE - OCTOBER 1939.

DEVELOPMENT FOOTAGE:- N I L.

WEST CENTRAL FLATS.

T. Bushby & Partners.

207 1/2 Days Worked.

|            | L  | W    | S.F.  | S.M.    | H   | C.F.        | C.M.            |                |
|------------|----|------|-------|---------|-----|-------------|-----------------|----------------|
| No.3 East. | 20 | x 12 | - 240 | - 22.30 | x 5 | - 1200      | - 33.98         | )              |
| " " South. | 19 | x 14 | - 266 | - 24.71 | x 5 | - 1330      | - 37.66         | )              |
| " " Roof.  | 17 | x 21 | - 357 | - 33.16 | x 5 | - 1785      | - 50.54         | ) @ Days Wages |
| No.4 West. | 12 | x 14 | - 168 | - 15.61 | x 5 | - 840       | - 23.78         | )              |
| " " North. | 11 | x 21 | - 231 | - 21.45 | x 5 | - 1155      | - 32.70         | )              |
| " " East.  | 14 | x 12 | - 168 | - 15.61 | x 5 | - 840       | - 23.78         | )              |
|            |    |      |       |         |     | <u>7150</u> | <u>- 202.44</u> | )              |

Tonnage to Mill:- 396

Wages Paid:- £87: -:-

Cost per Cu.M. :- 8/7.

**RODDERUP FELL MINE & MILL  
OCTOBER 1939**

MINE. During the month 596 Tons of Ore was mined and Crushed. Galena Concentrates produced amounted to 42.75 Tons. The percentage recovery was 10.79% the same as for September. To arrive at a proper valuation for September and October, the tonnages and output of Concentrates should be averaged. During September, we were unable to run the Mill after the 23rd and consequently the ore broken in the mine was not crushed by the 26th.

Work in the Flats is confined to the Middle Section west of the Incline, and work is carried out in 4 places, mainly in the top of the Limestone for from 1.5 to 2 metres. This is the only method we can adopt until we know what the price of Lead is likely to be, as by so doing, we can for some time keep the grade of ore at about 10%. Should the price of Lead rise to say about £20. per ton, it will be sound judgement and good engineering to increase the quantity mined, even if the grade drops to say about 9%.

Towards the end of the month, we put 4 more miners and labourers to work, and shall add two more, making 6 in all. It is not likely we shall get a full month's return from these men in November. The results will, however, indicate what the additional output is likely to amount to. It is important to watch the grade of ore recovered, as well as the quantity of bouse broken.

I anticipate the output for November will be not less than 40 Tons of Concentrates, and the grade not below 10%.

MILL. In good condition. During November, we shall have to run the Mill extra days, and, as we cannot run the Mill for more than 8 hours daily in November owing to lighting restrictions (we have not covered all the windows there with black cloth which is expensive), we may have to run the Mill three to four days weekly before the end of November.

| THE HENTHEAD MINES |     |      |      |     |     |     |     |     |     |
|--------------------|-----|------|------|-----|-----|-----|-----|-----|-----|
| NOVEMBER 1932      |     |      |      |     |     |     |     |     |     |
| b/s.               |     |      |      |     |     |     |     |     |     |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. | 811. | 810 | 810 | 810 | 810 | 810 | 810 |
| 95                 | 113 | 811. |      |     |     |     |     |     |     |

# Report of the Nenthead Mines November 1939

## REPORT OF THE NENTHEAD MINES

NOVEMBER 1939

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u>                  | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------|-----------------------------------|------------------|----------------|
| Ore Mined         | Nil.              | Machinery kept in fair condition. | 463 Tons         | 463 Tons.      |
| Ore Milled        | Nil.              |                                   | 463 Tons         | 463 Tons.      |
| Lead Concs. prcd. | Nil.              |                                   | 53.0 Tons        | 53.0 Tons.     |
| % Recovered       | Mine Closed       |                                   | 11.44%           | 11.44%         |
| Hours Worked      | Nil.              |                                   | 75.5 hours       | 75.5 hours.    |
| Tons per hour     | Nil.              |                                   | 6.13             | 6.13           |

### STOCKS.

|                             | <u>N'bury.</u> | <u>R'gill.</u> | <u>Rodderup.</u>         | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------------------------|----------------|----------------|--------------------------|------------------|----------------|
| Crude Ore                   | Nil.           | Nil.           | Nil.                     | 2300 Tons        | 2300 Tons.     |
| Blende-Witherite (Unwashed) | 50 Tons        | Nil.           | 150 Tons (Mainly Blende) | Nil.             | 200 Tons.      |

Rough Blende:- Nil.

Fine Blende:- Nil.

Galena at Nentsbury, 53.865 Tons; Potters Ore at Nentsbury, 9.500 Tons  
Galena at Rodderup, 41.160 Tons; Potters Ore at Rodderup, 176.224 Tons

|          |                       |         |
|----------|-----------------------|---------|
| Coal     | consumed at Rampgill, | 3 Tons. |
| Fuel Oil | " "                   | 1 "     |
| " "      | " Nentsbury,          | Nil.    |
| " "      | " Rodderup,           | 2 Tons. |

COMPRESSED AIR at 85 lbs. pressure produced at Rodderup, mainly from Water Power. The Fuel Oil Engine runs when the water supply is insufficient.

COMPRESSED AIR produced at Nenthead, mainly from Water Power.

Pressure at Wellhope 75 to 80 lbs per square inch.

*RZ*

## **NENTSBURY MINE & MILL NOVEMBER 1939**

Only the maintenance of the mine has been done in Nentsbury. The mine generally is in fair condition.

DEVELOPMENT IN THE FIRESTONE STRATUM. During the month, the covering of the Shaft was completed at 138 feet below surface, the pipe-lines repaired and drilling actually commenced in the Forebreast E. on Nov. 17<sup>th</sup>. The distance from the shaft at the end of November was 21 feet (6.40 metres). The calculated distance from Wellhope Shaft to Cox Vein was worked out to be 35 feet (10.66 metres). Work is proceeding according to Plan, and before December 9<sup>th</sup> we should drive the level beyond the 10.66 metres where the Vein is calculated to be. It must be considered this is a piece of calculation based on the inclination of Rampgill Vein in Rampgill Shaft. The work is being done as economically as possible, and, if the Veins are anywhere near where we expect to cut them, the work will be done well within the estimate submitted.

POTTERS ORE. No sales. There is no free market for Lead in England.

GRAVEL SALES. The sales of Gravel have dropped considerably owing to wintry weather. The amount sold was 62.85 Tons, profit £9. 19. 4.

BLENDE-WITHERITE. Dr Tyrer of Messrs. Athole G. Allen Ltd. Wrote stating he had passed for payment the account submitted for £309. 14. 7. We have not yet received this firm's cheque, but hope to do so before the end of September.

RODDERUP MINE - NOVEMBER 1939.

DEVELOPMENT FOOTAGE:- NIL.

West Central Flats.

T. Bushby & Partners.

205 Days Worked.

|      |         | L  | W    | S.F.  | S.W.    | H.  | C.F.   | C.M.        |                   |
|------|---------|----|------|-------|---------|-----|--------|-------------|-------------------|
| No.3 | Flat E. | 13 | x 14 | - 182 | - 16.91 | x 5 | - 910  | - 25.77     | )                 |
| " "  | " W.    | 14 | x 14 | - 196 | - 18.21 | x 5 | - 980  | - 27.75     | )                 |
| No.4 | " W.    | 26 | x 13 | - 338 | - 31.40 | x 5 | - 1690 | - 47.85     | )                 |
| " "  | " W.    | 10 | x 15 | - 150 | - 13.93 | x 5 | - 750  | - 21.24     | )                 |
| " "  | " N.W.  | 13 | x 19 | - 247 | - 22.94 | x 5 | - 1235 | - 34.97     | )                 |
| " "  | " W.    | 15 | x 23 | - 345 | - 32.05 | x 5 | - 1725 | - 48.84     | )                 |
|      |         |    |      |       |         |     |        | <u>7290</u> | - <u>206.42</u> ) |

8 Days  
Wages.

Tons to Mill:- 463

Wages Paid:- £100: 5: 0.

Cost per Cu.M.:- 9s/9d.

**RODDERUP FELL MINE & MILL  
NOVEMBER 1939**

MINE. During the month 463 Tons of ore was mined and crushed for a recovery of 53 Tons of Concentrates. Recovery percentage was 11.44%. It is pleasing to note that although we increased the tonnage, the grade improved from 10.97% to 11.44%.

The grade of ore in the Flats was maintained and the outlook for December indicates a similar grade. It is impossible to state how long we can maintain the grade now mined, as we have no blocked out reserves. Work is from day to day.

I posted a suggested Budget for 1940 yesterday, with a print of the plan of the mine showing the workings during 1939.

MILL. In good condition. New Roller Shells have been fixed, hence the increased tons per hour crushed.





# Report of the Nenthead Mines December 1939

## REPORT OF THE NENTHEAD MINES

DECEMBER 1939.

|                     | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|---------------------|-------------------|------------------|------------------|----------------|
| Ore Mined           | Nil.              | Maintained       | 480 Tons.        | 480 Tons.      |
| Ore Milled          | Nil.              | in good          | 480 Tons.        | 480 Tons.      |
| Lead Concs. prodcd. | Nil.              | order as         | far as           |                |
| % of Galena         | Nil.              | possible.        | 53.50 Tons.      | 53.50 Tons.    |
| Hours worked        | Nil.              |                  | 11.14%           | 11.14%         |
| Tons per hour       | Nil.              |                  | 79 hours.        | 79 hours.      |
|                     |                   |                  | 6.07             | 6.07           |

## STOCKS.

|                  | <u>N'bury.</u> | <u>N'hill.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|----------------|----------------|------------------|------------------|----------------|
| Crude Ore        | Nil.           | Nil.           | Nil.             | 2300 Tons        | 2300 Tons.     |
| Blende-Witherite | 50 Tons        | Nil.           | 150 Tons         | Nil.             | 200 Tons.      |
| (Uncashed)       |                |                | (Mainly Blende)  |                  |                |

Rough Blende: Nil.  
Fine Blende: Nil.

Galena at Nentsbury, 53.865 Tons. Potters Ore at Nentsbury, Nil.  
Galena at Rodderup, 47.660 Tons. Potters Ore at Rodderup, 222.720 Tons

Coal Consumed at Rampgill, 3 Tons.  
Fuel Oil " " " " 0.75 "  
" " " " Nentsbury, Nil.  
" " " " Rodderup, 2 Tons.

COMPRESSED AIR at 85 lbs. pressure produced at Rodderup from  
Water Power and the Fuel Oil Engine.

COMPRESSED AIR produced at Nenthead from Water Power. Pressure  
at Wellhope, 75 to 80 lbs. per square inch.

## **NENTSBURY MINE & MILL DECEMBER 1939**

In Nentsbury Mine, only maintenance is done.  
The Mine is in fair condition.

DEVELOPMENT IN THE FIRESTONE STRATUM. During the month the forebreast E. from Wellhope Shaft was extended 21 ft. (6.40 metres) to 72 ft. (21.94 metres) or some 30ft beyond where we expected to be in the vicinity of one of the N. and S. Veins.. The only thing seen on the X-Cut (or Drive) was a fissure approx. 21ft E. of the shaft. It cannot be regarded as a Vein having any resemblance to either the "C" or "D" Veins below. There is no displacement of the stratum and it contains no mineral. Towards the end of the month we rose on this fissure and shall carry up the Rise to a total height of 2 or 3 metres. We will also drive W. for a short distance in January, and if nothing is found continue E. Not finding a Vein is perplexing and disappointing. It can scarcely be imagined that two well defined Veins below died out entirely in the strata between the Limestone and the Firestone.

POTTERS ORE. We sold 10 tons to Morris Ashby Ltd. In December.

GRAVEL SALES. The total amount sold was 78.75 Tons. The profit from the sales amounted to £11. 12. 7. The winter weather is upsetting sales of Stone and Gravel. Almost all accounts outstanding were paid at the end of the year.

BLENDE-WITHERITE. Payment of £308. 0. 6. Was received from Messrs. Athole G. Allen (Stockton) Ltd. During the month.

RODDERUP MINE - DECEMBER 1939.

DEVELOPMENT FOOTAGE :- Nil.

WEST CENTRAL FLATS.

T. Buchby & Partners.

236 Days Worked.

|                         | L       | W | S.F. | S.M. | H         | C.F. | C.M.          |                 |
|-------------------------|---------|---|------|------|-----------|------|---------------|-----------------|
| No. 3 Flat              | 8 x 11  | = | 88   | =    | 8.17 x 5  | =    | 40.85         | 12.46 )         |
| " " "                   | 5 x 13  | = | 65   | =    | 6.04 x 5  | =    | 30.20         | 9.20 )          |
| " 4 "                   | 10 x 22 | = | 220  | =    | 20.43 x 5 | =    | 102.15        | 31.14 )         |
| " " "                   | 16 x 22 | = | 352  | =    | 32.70 x 5 | =    | 163.50        | 49.83 )         |
| " " "                   | 27 x 15 | = | 405  | =    | 37.62 x 5 | =    | 188.10        | 57.34 )         |
| " " Roof                | 22 x 20 | = | 440  | =    | 40.87 x 5 | =    | 204.35        | 62.29 )         |
| No. 3 Filler & Section. | 12 x 15 | = | 180  | =    | 16.72 x 9 | =    | 150.50        | 45.87 )         |
|                         |         |   |      |      |           |      | <u>947.00</u> | <u>268.13</u> ) |

6 Days  
Wages

Tons to Mill:- 480.

Wages Paid:- £103: 3s: 4d.

Cost per Cu.M.:- 7s/4d.

**RODDERUP FELL MINE & MILL  
DECEMBER 1939**

MINE. During the month 480 Tons of Ore was mined for a recovery of 53.56 Tons of Concentrates, equal to 11.14%.

The mine at the end of the year showed little change compared with the end of June 1939. Ore of fair grade is mined in the higher part of the Tynebottom Limestone, and it seems that there is a fair quantity of moderately good ore near the fissure or fault which diagonally crossed the Flatted area and ran into Rodderup Vein. The outlook for some months, is that ore of the grade recently mined should be broken in moderate quantities. Any larger quantity must be determined by development. I consider the mine prospects are brighter than at the end of 1939, and when the question of transport and Smelters' charges is settled, the value per ton of ore should show an improvement. I hope to send more detail in my annual report, after obtaining information on several points.

MILL. The Mill is in good condition.



## ANNUAL REPORT OF THE NENTHEAD MINES 1939

January 16<sup>th</sup> 1940

### NENTSBURY

During January and February, 2118 Tons of Mixed Ore was mined. This Ore contained Galena, Blende and Witherite. In March, 187 Tons from the Rises was extracted and crushed. The total quantity mined and crushed for the year amounted to 2305 Tons.

Galena Concentrates produced from this ore amounted to 58.75 Tons, assaying approximately 82% Pb.

Mixed Concentrates produced amounted to 778.75 Tons, from which was obtained approx. 520 Tons of BaCO<sub>3</sub> (100%). The BaCO<sub>3</sub> content of the mine ore was therefore approx. 22.56%, BaCO<sub>3</sub>. Concentrated the percentage was 520 Tons 100% BaCO<sub>3</sub> from 778.75 Tons of Concentrates, equal to approx. 66.6% BaCO<sub>3</sub>.

The Zinc content of the Mixed Concentrates, assayed, on average, 14.16% per ton, equal to 110.27 Tons of Pure Zinc.

During March and until April 6th, 1791 Tons of Stock Middlings were re-treated at the Mill, with a small quantity of Mine ore. This produced: -

Galena Concentrates from the Mine Ore - 24.40 Tons, assaying 80-82% Pb.

Mixed Concentrates from the Middlings, - 1044.725 Tons, assaying 46.12% BaCO<sub>3</sub> (equal to 471.90 Tons of 100% BaCO<sub>3</sub>) and 22.37% Zn, (equal to 233.754 Tons of Pure Zinc).

All work in Nentsbury was suspended from March 4th. After that date, and until the end of the year, the mine workings were maintained in a fair condition.

Development in the Firestone Stratum in Wellhope Shaft. Operations commenced Oct. 16th in Wellhope Shaft, and from that date onwards, a platform was erected in the shaft, new ropes fixed, temporary Headgear erected, and guide ropes in the shaft changed to allow hoisting by Kibble instead of cages. The purpose of these alterations was to enable us to use Compressed Air, instead of the more expensive use of Electricity. This work was completed by Nov. 16th.

Driving in the E. forebreast commenced Nov. 17th. Up to December 23rd, the end of the Company's year, the forebreast E. had been driven a total distance of 72 feet, (21.94 metres) E. of the Shaft. Except for a small and somewhat ill-defined fissure which crossed the level (or X-Cut) about 21 ft. (6.40 metres) E. of the shaft, no sign of a Vein was found. It should be taken into consideration that, although it is disappointing not to have discovered a Vein in the distance driven, it is impossible to surmise that Veins, both well developed and rich 219

feet below, have completely died out. It would be more satisfactory, although disappointing, if we had found a Vein, even if it did not contain Lead Ore in payable quantities. As previously recommended, I suggest that the X-cut W. should be driven up to 20 to 22 feet from the shaft, and if nothing is found in that distance, resume driving E.

It is impossible to make a close calculation with no information to guide us in the area around Wellhope which, geologically, is a most disturbed one owing to the close proximity of two N. & S. Veins and 2 E. & W. Veins, each displacing the strata, some on one side and some on another, each causing a horizontal throw varying from 6 to 20 feet. It is known that the Veins have only a slight inclination in a hard stratum, but often in a Plate or soft stratum, the Veins incline up to 45 degrees. Taking all these things into consideration, I can only reiterate the suggestions already made, viz: drive E. a further reasonable distance.

Ore Reserves. At the end of the year, the Ore Reserves amounted to 76633 Tons of which 73671 Tons were Mixed Ore and 2962 Tons Lead Ore.

The Mixed Ore was estimated to contain about 5% Galena, 9.5% Blende, and 12.56% Witherite.

The Lead Ore was estimated to contain 5% Galena, from recent results, the estimate of 5% Galena in the Lead Ore is likely to be exceeded, and, in all probability, the tonnage will exceed 2962 Tons but not to any great extent, unless richer ore should be discovered in working out the existing deposit.

Price of Lead. The price of Lead was fixed by the British Government, when war was declared, at £16. 12. 6. for Foreign Lead at works. On Dec. 18th, the British Government raised the price from £16. 12. 6. to £25. 0. 0. delivered to Buyer's works.

Price of Zinc. The price of Zinc was fixed by the British Government, when war was declared, at £15. 0. 0. This was raised on Dec. 18th, to £25. 15. 0. delivered at Buyer's works.

I have reported from time to time and directly I have obtained information, to Head Office, with recommendations and suggestions re: the effect of the increased price, and the working of Nentsbury during 1940.

The results of the exploration in the Firestone Stratum at Wellhope will, if a payable Vein is discovered, materially effect the future working of Nentsbury. Should no vein be discovered, or if discovered prove unpayable, attention could be given to working Nentsbury on the lines suggested in my note of January 4th.

I enclose a tracing of the area around Wellhope Shaft, and have shown the X-cut E. & W. of the shaft, in Red.



Gravel Sales. During 1939, a total quantity of 774.35 Tons of Gravel, Stones, etc. were sold from Nentsbury, at a profit, after meeting all transport charges, commissions, etc., of £108. 7s. 9d. This is equal to a profit of 2.79 sh. per ton of Gravel sold.

### **RODDERUP FELL**

During 1939, the tonnage mined at Rodderup amounted to 3249 Tons, all of which was crushed, and in addition, 56 Tons of accumulated ore making a total of 3305 Tons crushed and washed.

The tonnage of Galena Concentrates recovered was 364.74 Tons, which yielded a recovery of 11.03% Galena.

The ore was mined from the Flats on the North side of Rodderup Vein, in the West Central area. In the latter part of 1938, I made reference to what seemed like a fault, which crossed the Flats in a diagonal direction. There had not been sufficient work done then to prove what the influence of this "Fault" would be, neither have we done sufficient work since to enable us to make a definite statement to the effect that a considerable quantity of high grade ore is available. From the results obtained in 1939, the effect of the Fault indicates that the deposit of Galena in the Flats in the Tyne Bottom Limestone has been enriched, mainly in the top 6 ft. (about 2 metres) of the Limestone. How far this ore extends N., or E. and W., it is impossible to state.

It was with the hope that the indications seen in the latter part of 1938 would materialise, that I felt it was my duty, in January 1939, to suggest a scheme for working Rodderup on a small scale. The results have been better than I anticipated.

It must be taken into consideration that during 1939, the mine has been worked under exceptional advantageous conditions. Water power was mainly sufficient to supply both the mine and the mill. Rock Drills were in a good state of repair, and by using 4 only out of 12, the cost of maintenance was only trifling. The same applied to the Mill. The cost of maintenance was small as we used the spares we had on hand, most of which had been already charged out. Thus 1939 costs were unusually low. I took all these things into consideration when submitting a Budget for 1940, on Dec. 4th 1939.

Prospects for 1940. Respecting the outlook for Rodderup for 1940, it is my considered opinion that unless some unforeseen circumstances arises, we can expect to maintain a moderate output of ore of about 10% yield. I would however, suggest in the Company's interest, that, as the price of Lead has been fixed at £25 per Ton, and it seems we may expect about 300/- per ton for our Concentrates, the Company should allocate some of the revenue to do a limited amount of Development in the West Central Area, particularly N. and W. If, say, 4 miners were employed on this work, any revenue which might accrue would go to the Company's benefit and add to the returns. In any case, it would give us a certain amount of information we do not now possess, and would enable

us to decide what policy we could adopt and on what scale we could work the mine with safety.

I see no reason to suggest altering the probable tonnage we submitted at the end of 1938, except by reducing it by the tonnage mined during 1939, and even that is a safeguard because indications are that payable ore exists N. beyond the points indicated in the area marked in 1938.

I regard the outlook for Rodderup during 1940, as much brighter than the outlook for 1939. Full particulars have been sent to Head Office and Mr Chaplain, from time to time, and, at this stage, I do not think I can add to them. Even with an improved price of Lead, I consider the mine should be worked economically by increasing the number of miners, as and when these can be employed, to increase the output and not decrease the grade below, say, 10% Galena, assuming of course, that the present grade of ore in the Flats is more or less maintained.

I must point out that during 1940, Cost of Labour, which has risen considerably all around us and in this country generally, will increase, and also the cost of the supplies of all kinds. Consequently, the cost during 1940 may even exceed the cost per ton indicated in my letter of December 4th. On the basis of 300/- per ton for concentrates, the value of a 10% ore is 30/- per ton. The overall cost I submitted, was 25/- per ton. This figure may be exceeded. On the other hand, the value is likely to be rather more. At present, there is no big increase in the costs, but it is wise now to anticipate what, in all probability will occur during 1940.

Regarding the value of Concentrates produced during 1939, I am not giving a figure, as the stocks have not yet been sold, and the value will be that assigned to it by Head Office.

Gravel Sales. During 1939, 3686 Tons of Gravel, Stones, etc., were sold from Rodderup, realising a profit of £546. 15. 5. after meeting all transport charges, commissions etc., etc. This is equal to 2.96/- per ton of Gravel sold.

# Report of the Nenthead Mines January 1940

## REPORT OF THE NENTHEAD MINES.

JANUARY 1940.

|                     | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|---------------------|-------------------|------------------|------------------|----------------|
| Ore Mined           | Nil.              | Maintained       | 440 Tons         | 440 Tons.      |
| Ore Milled          | Nil.              | in good          | 227 "            | 227 "          |
| Lead Cons. produced | Nil.              | condition        | 26.5 "           | 26.5 "         |
| % of Galena         | Nil.              | as far as        | 11.67%           | 11.67%         |
| Hours Worked        | Nil.              | possible.        | 37 hours         | 37 hours       |
| Tons per hour       | Nil.              |                  | 6.13             | 6.13           |

### STOCKS.

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-------------------|-------------------|------------------|------------------|------------------|----------------|
| Blende-Mitherrite | 50 Tons           | Nil.             | 150 Tons         | Nil.             | 200 Tons.      |
| Crude Ore.        | (Unwashed)        | Nil.             | (Mainly Blende)  |                  |                |
|                   | Nil.              | Nil.             | 213              | 2300 Tons        | 2513 Tons.     |

Rough Blende: Nil.  
Fine Blende: Nil.

Galena at Nentsbury, 53.865 Tons. Potters Ore at Nentsbury, Nil.  
" " Rodderup, 52.910 Tons. Potters Ore at Rodderup, 240.474 Tons.

Note: The figure of 58.65 in the Weekly Report is a clerical error. The correct stock is 53.865 Tons.

|                            |          |
|----------------------------|----------|
| Coal consumed at Rampgill, | 2.0 Tons |
| Fuel Oil " " " "           | 1.0 "    |
| " " " " Nentsbury,         | Nil. "   |
| " " " " Rodderup,          | 2.5 "    |

COMPRESSED AIR produced at Rodderup from Water and Fuel Oil, at 85 lbs pressure and approximately 500 cu. ft. per minute.

COMPRESSED AIR produced at Nenthead from Water Power, 400 cu.ft. per minute at 75 to 80 lbs. pressure at Wellhope Shaft.

## **NENTSBURY MINE & MILL JANUARY 1940**

Nentsbury Mine is inspected periodically and main levels kept in good condition. Small falls have occurred in some of the small levels, but so far none are extensive.

### DEVELOPMENT IN THE FIRESTONE STRATUM

At the end of December, the drive E. was extended to a length of 72 ft., equal to 21.94 metres. No Vein discovered.

In December report, reference was made to a fissure 21 ft. E. of the shaft. It was then stated that this fissure could not, as seen, be regarded as a Vein. To prove the fissure a rise was put up 7.5 ft. equal to 2.27 metres. What resembled two walls were found about 1 metre apart. There was no displacement of the strata, and no mineral was visible. The X-cut E. was driven 11 ft., equal to 3.19 metres, extending the drive to a total distance W. of 22 ft., equal to 6.38 metres. No Vein was discovered.

The drive E. was extended 20 ft., equal to 6.06 metres the total length of the drive E. is now 92 ft., equal to 28.03 metres. Owing to extreme erotic weather conditions the water supply at Nenthead and Wellhope was completely frozen, and we could neither produce Compressed Air nor pass it through the pipe-lines had we been able to produce it.

The extreme conditions still exist. Work was suspended on January 19th. Previous to the suspension of work, the strata dipped rapidly E. so much so that the drive commenced just below the Firestone at the shaft was up a metre in the Firestone in the forebreast.

I can only reiterate that the non-finding of a Vein is most perplexing, and indicates mainly one or two things; first, either the Veins have been thrown further E. than we expected, and secondly, for some unaccountable reason they do not exist. If the latter, it is hard to explain why Veins productive and well-formed directly below, do not exist about 230 foot above. I suggest when water is available, that the drive E. be continued at least until we have driven about one-half the vertical height from the top of the Limestone to the Firestone. It is not easy to recommend any solution to what is at present a perplexing problem.

The minors from Wellhope were employed from January 22nd, in removing good tram-rails and air and water pipes in the Eastern section of Scraith Hole Mine. We shall require rails and pipes in Rodderup this year, and as these are almost unobtainable, and if obtainable very expensive, I considered it was economical to remove all good material from the Eastern area. In about a month, 3 miners and a foreman, will remove as many rails and pipes as we shall require at Rodderup this year.

POTTERS ORE. None sold.

GRAVEL SALES. During the month 131.60 Tons of Gravel were sold from Rodderup. The net revenue amounted to £21. 16. 10.

GENERAL. Letters relating to the price of Lead, the value of a ton of 80% Pb concentrates, and an offer for 100 Tons of concentrates from Messrs. Walker

Parker, Newcastle, and letters and quotations and also particulars and copies of letters referring to a permit to export the Zinciferous Residue from Stockton, and shipping particulars have been sent to Head Office and Mr Chaplain, as and when they came to hand.

We are doing our utmost to maintain the Co.'s property with as few men as possible. The extreme weather conditions may have done some damage to the electric power-line from Rampgill to Wellhope. We shall not know to what extent until the weather improves.

RODDERUP HILL MINE.JANUARY 1940.

DEVELOPMENT FOOTAGE:- Nil.

WEST CENTRAL FLATS.T. Bushby & Partners.236 Days Worked.

|            | L  | W    | S.F.  | S.M.    | H   | C.F.        | C.M.           |   |
|------------|----|------|-------|---------|-----|-------------|----------------|---|
| No. 3 Flat | 6  | x 10 | = 60  | = 5.57  | x 5 | = 300       | = 8.49         | ) |
| " " Roof   | 25 | x 22 | = 550 | = 51.09 | x 5 | = 2750      | = 77.87        | ) |
| " 4 Flat   | 12 | x 19 | = 228 | = 21.18 | x 5 | = 1140      | = 32.28        | ) |
| " " Roof   | 14 | x 21 | = 294 | = 27.31 | x 5 | = 1470      | = 41.62        | ) |
| " " Pillar | 17 | x 11 | = 187 | = 17.37 | x 5 | = 935       | = 26.47        | ) |
|            |    |      |       |         |     | <u>6595</u> | <u>-186.73</u> | ) |

3 Days Wages

Tonnage to Mill:- 440

Wages Paid: £103: 17: 9.

Cost per Cu.M.:- 11s/1d.

### RODDERUP MINE & MILL JANUARY 1940

During the month, 440 Tons of Ore was mined and 227 Tons crushed and washed. The recovery amounted to 26.5 Tons of Galena concentrates. The recovery per ton of ore was 11.67%. Tonnage put into stock amounted to 215 Tons of similar grade to what was crushed. The grade of the ore in the Plate is on average equal to what has recently been mined and is about 11% Galena. Since milling was suspended we have employed about 70% of the miners breaking the richest ore and leaving it in the Flats. We shall continue doing this as long as we can find room to stock the ore. We have also to pump the water daily to keep the workings unwatered. A small supply of water for the Hydro Compressor has been maintained with difficulty, generally sufficient to pump the water. The fuel Oil Engine has maintained a supply of Compressed Air for 3 Rock Drills. The position underground is unchanged and the value of the ore in the mine is fully maintained.

MILL. I reported in the weekly reports that Milling had to be suspended on January 12th, owing to the water supply being completely frozen. Since January 12th and up to the end of the month the weather conditions continued bad. Snow fell almost continuously for a week and the temperature was several degrees below freezing point. Consequently work out of doors was impossible, and all traffic by road and rail was cut off for days, and at the end of the month, main roads were blocked with snow, some to a depth of several metres. Directly a thaw comes and water is available, we shall run the Mill daily until all the ore in stock outside and inside the mine is crushed and washed. The weather conditions are worse than any experienced for many years.

187 187 . 187 236 . 236 236 . 17 . 233 . 233 187 079 079 155 066 69 . 519 515 515 131 131 514 2 301 068  
 187 187



# Report of the Nenthead Mines February 1940

## REPORT OF THE NENTHEAD MINES.

FEBRUARY 1940.

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u>                    | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------|-------------------------------------|------------------|----------------|
| Ore Mined         | Nil.              | Maintained<br>in good<br>condition. | 323 Tons.        | 323 Tons.      |
| Ore Milled        | Nil.              |                                     | 536 "            | 536 "          |
| Lead Concs. prcd. | Nil.              |                                     | 60.50 "          | 60.50 "        |
| % of Galena       | Nil.              |                                     | 11.27%           | 11.27%         |
| Hours worked      | Nil.              |                                     | 93 hours.        | 93 hours.      |
| Tons per hour     | Nil.              |                                     | 5.76 Tons        | 5.76 Tons.     |

### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>            | <u>Bellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|-----------------------------|------------------|----------------|
| Blende-Witherite | 50 Tons.          | Nil.             | 150 Tons<br>(Mainly Blende) | Nil.             | 200 Tons.      |
| Crude Ore.       | Nil.              | Nil.             | Nil.                        | 2300 Tons        | 2300 Tons.     |

Rough Blende: Nil.

Fine Blende: Nil.

Galena at Nentsbury, 53.865 Tons. Potters Ore at Nentsbury, Nil.  
 " " Rodderup, 91.910 " " " " Rodderup, 265.474Tons.

From the above, approx. 105 English Tons was sold to  
 Messrs. Walkers Parker, Newcastle. The final figures  
 are not yet to hand.

|                            |          |
|----------------------------|----------|
| Coal consumed at Rampgill, | 2.0 Tons |
| Fuel Oil " " "             | 0.5 "    |
| " " " " Nentsbury,         | Nil.     |
| " " " " Rodderup,          | 3.75 "   |

COMPRESSED AIR produce. at Rodderup, mainly from Fuel Oil, during  
 February was approx. 400 cu.ft. per minute, Pressure 80-85 lbs  
 per square inch. Owing a small quantity of Water was available  
 owing to severe frost.

COMPRESSED AIR at Nenthead - None produced during February. The  
 Water Supply was completely frozen.

## **NENTSBURY MINE & MILL FEBRUARY 1940**

**DEVELOPMENT IN THE FIRESTONE STRATUM.** Development in the Firestone Stratum at Wellhope was held up during February for lack of Compressed Air. A most severe snow—storm filled the water-courses to a depth of several feet, which, almost immediately was frozen. Consequently, in a very short time, the water supply completely failed and all work in Wellhope was suspended during February.

The miners (3) under the foreman were employed part time In Scraith Hole Mine, removing tram-rails and pipes from the most inaccessible parts of the mine. These rails and pipes will be needed this year In Rodderup Mine. During the last two weeks of the month, the miners were employed repairing about 30 metres of the roof and sides of the main level in Nentsbury. The sides and roof of the level were rebuilt with stones. There is another length which must be rebuilt in a month or so.

Work will be resumed in Wellhope Shaft during March, when the drive W. of the Shaft will be continued.

**POTTERS ORE.** None sold.

**LEAD CONCENTRATES.** A parcel of 105 Tons 5 hundredweight and 3 quarters (British weight) was delivered to Messrs. Walkers, Parker's works, Newcastle, during the month. Final weights, percentages of moisture and assay results are not yet to hand. Copies of all correspondence referring to the sale have been sent to Head Office.

**ZINCIFEROUS RESIDUE.** Since the end of February, a Licence has been granted by the Minister of supply, which enables us to export the 90-100 Tons of Residue in the near future.

**GENERAL.** The poles carrying the cable from Rampgill to Wellhope Shaft were found to be broken in many places over the high parts of the Fell. Those polos were erected in 1929 rather more than 10 years ago. It will be necessary to repair thorn this summer, and not less than 12 to 13 poles will be required if the power line is to be maintained.

RODDERUP FELL MINE - FEBRUARY 1940.

DEVELOPMENT FOOTAGE :- N 1 1.

West Central Flats.

T. Bushby & Partners.

156 Days Worked.

|            | L  | W    | S.F.  | S.M.    | H   | C.F.        | C.M.            |   |
|------------|----|------|-------|---------|-----|-------------|-----------------|---|
| No. 3 Flat | 5  | x 12 | = 60  | = 5.57  | x 5 | = 300       | = 8.49          | ) |
| " " "      | 4  | x 14 | = 56  | = 5.20  | x 5 | = 280       | = 7.93          | ) |
| " " Roof   | 20 | x 20 | = 400 | = 37.16 | x 5 | = 2000      | = 56.63         | ) |
| " 4 Flat   | 9  | x 20 | = 180 | = 16.72 | x 5 | = 900       | = 25.48         | ) |
| " " "      | 7  | x 23 | = 161 | = 14.96 | x 5 | = 805       | = 22.79         | ) |
| " " Side   | 4  | x 8  | = 32  | = 2.97  | x 5 | = 160       | = 4.53          | ) |
|            |    |      |       |         |     | <u>4445</u> | <u>= 125.85</u> | ) |

) Days Wages

Tonnage to Mill :- 323 Tons

Wages Paid:- £70: 10: 11.

Cost per Cu.M.:- 11s/2d.

**RODDERUP FELL MINE & MILL  
FEBRUARY 1940**

MINE. Owing to the weather and sickness, February was a broken month. It was impossible part of the month to carry on work either in the mill or the mine. Outside the water supply was frozen, and the small supply of water from the mine was just sufficient to cool the Engine and Compressors. Part of the Compressed Air was used to pump the water and keep the mine unwatered and consequently there was only part of a supply available for drilling. Considering the extreme weather conditions, the result of the month's work and output was most gratifying.

During the month 323 Tons was mined and this added to the 213 Tons left in stock at the end of January, was crushed and yielded 60.5 Tons of Lead Concentrates. The recovery per ton of Ore was 11.27%.

Conditions improved towards the end of the month. The outlook for March, if weather conditions are normal, should be up to the average.

The mine position is unchanged. We are, of working as much good ore as possible. This ore is found N. of the fault in the Central Area. The prospect of finding a good quantity of ore of about 10% Galena, in this area, seems likely, and to prove if such exists, arrangements should be considered to develop by driving N. to ascertain how far this grade ore extends. In a separate note posted a day or two ago, I gave particulars and suggested Head Office should give the matter consideration.

MILL. The Mill generally is in good repair.

|     |   |     |     |   |     |      |   |      |     |   |    |   |     |   |     |      |      |      |      |      |      |      |   |      |     |      |     |   |     |      |
|-----|---|-----|-----|---|-----|------|---|------|-----|---|----|---|-----|---|-----|------|------|------|------|------|------|------|---|------|-----|------|-----|---|-----|------|
| 323 | - | 323 | 126 | - | 126 | 2.56 | - | 2.56 | 156 | - | 36 | - | 142 | - | 102 | 2.07 | 2.07 | 0.80 | 0.80 | 1.08 | 0.66 | 91-  | - | 91-  | 810 | 1310 | 5/3 | 2 | 232 | 0.71 |
| 440 | - | 440 | 187 | - | 187 | 2.55 | - | 2.55 | 236 | - | 47 | - | 180 | - | 235 | 1.86 | 1.86 | 0.79 | 0.79 | 1.55 | 0.66 | 89   | - | 89   | 815 | 1311 | 5/3 | 2 | 301 | 0.68 |
| 381 | - | 381 | 156 | - | 156 | 2.45 | - | 2.45 | 146 | - | 41 | - | 257 | - | 237 | 1.97 | 1.97 | 0.79 | 0.79 | 1.63 | 0.66 | 8105 | - | 8105 | 819 | 1312 | 5/3 | 2 | 266 | 0.69 |
|     |   |     |     |   |     |      |   |      |     |   |    |   |     |   |     |      |      |      |      |      |      |      |   |      |     |      |     |   |     |      |
|     |   |     |     |   |     |      |   |      |     |   |    |   |     |   |     |      |      |      |      |      |      |      |   |      |     |      |     |   |     |      |
|     |   |     |     |   |     |      |   |      |     |   |    |   |     |   |     | -    | -    | 157  | 1311 |      |      |      |   |      |     |      |     |   |     |      |
|     |   |     |     |   |     |      |   |      |     |   |    |   |     |   |     | -    | -    | 126  | 1316 |      |      |      |   |      |     |      |     |   |     |      |

## Report of the Nenthead Mines March 1940

REPORT OF THE NENTHEAD MINES.

MARCH 1940.

00000000

|                      | <u>Nentsbury.</u> | <u>Rampgill.</u>                                  | <u>Rodderup.</u> | <u>Totals.</u> |
|----------------------|-------------------|---------------------------------------------------|------------------|----------------|
| Ore Mined            | Nil.              | Machinery maintained in good condition            | 455              | 455 Tons.      |
| Ore Milled           | Nil.              | Several of the Belts have been taken to Rodderup. | 455              | 455 Tons.      |
| Lead Concs. produced | Nil.              |                                                   | 50.9             | 50.9 Tons.     |
| % of Galena          | Nil.              |                                                   | 11.18%           | 11.18%         |
| Hours Worked         | Nil.              |                                                   | 80               | 80 hours.      |
| Tons per hour        | Nil.              |                                                   | 5.68             | 5.68 Tons.     |

S T O C K S.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>            | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|-----------------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.                        | 2300 Tons.       | 2300 Tons      |
| Blende-witherite | 50 Tons.          | Nil.             | 150 Tons<br>(mostly Blende) | Nil.             | 200 Tons       |

Rough Blonde.....Nil.

Fine Blend.....Nil.

|                                   |                                |
|-----------------------------------|--------------------------------|
| Galena at Nentsbury, 53.865 Tons. | Potters Ore at Nentsbury, Nil. |
| " " Rodderup, 135.160 " "         | " " " Rodderup, 273.124 Tons.  |

Note/ Since March 26th, the weight of the parcel of ore delivered to Messrs. Walkers Parker & Co., Ltd., Newcastle-on-Tyne, on the 27th Febr., has been settled. The weight was 105.292 Metric Tons dry weight. This amount should be deducted from the total at Rodderup, to arrive at the stock in hand.

|          |             |            |           |
|----------|-------------|------------|-----------|
| Coal     | consumed at | Rampgill,  | 2.0 Tons. |
| Fuel Oil | "           | "          | 0.5 " "   |
| "        | "           | Nontsbury, | Nil.      |
| "        | "           | Podderup,  | 3.5 " "   |

COMPRESSED AIR produced at Rodgerup from Water and the Fuel Oil Engine when required, approximated to about 450 cu.ft. per minute at a pressure of 80 to 85 lbs per square inch.

COMPRESSED AIR produced at Nenthead from Water Power, about 450 cubic feet per minute at Nenthead and 350 to 400 cubic feet per minute at Wellhope at about 75 lbs per square inch.

**NENTSBURY MINE & MILL**  
**MARCH 1940**

DEVELOPMENT IN FIRESTONE STRATUM. During the month the X-cut W. was driven 57 feet.

Total distance driven W. at the end of the Month was 59 feet. Nothing of importance was found in driving this level and neither do I expect to find either of the Veins W. of Wellhope Shaft. Work next month will be resumed in the X-cut E. of the shaft. I can only reiterate what I wrote under "Remarks" in my Weekly Report, Janry. 13th, viz: -

"I suggest we continue driving; E. until we have driven not less than about 110 feet." If a Vein is found, it is my opinion it will be found E. of the Shaft.

POTTERS ORE. None sold.

LEAD CONCENTRATES. At the end of the month no settlement had been reached re: the sale of the parcel of Lead concentrates delivered to Messrs. Walker Parker & Co., Ltd., Newcastle-on-Tyne. Note.

On March 29th a settlement was reached and full particulars were sent to Head Office and Mr. Chaplain.

ZINCIFEROUS RESIDUE. After much delay, re: a licence to export, a parcel of Zinciferous Residues was despatched from Middlesbrough to Antwerp. Full particulars re: the parcel were sent to Head Office.

SALE of SCRAP. We have sold about 20 tons of Cast Iron, and have about 10 Tone of Cast Steel and Light Scrap to be delivered. We have not obtained a purchaser for the standards of the Aerial ropeway, and have had no instruction re: the old Lancashire Boiler and the Economiser etc. at Fitting Shop.

GENERAL. No repairs have yet been made to cable for carrying Electric Power from Nenthead to Wellhope.

RODDERUP FELL MINE

MARCH 1940.

DEVELOPMENT FOOTAGE:- Nil.

WEST CENTRAL FLATS.

T. Bushby & Partners.

221 Days Worked.

|                | L       | W | S.F. | S.M. | H     | C.F. | C.M. |                |
|----------------|---------|---|------|------|-------|------|------|----------------|
| No. 2 Flat     | 9 x 12  | - | 108  | -    | 10.03 | x 5  | -    | 500 - 15.29    |
| " 3 " Left     | 20 x 14 | - | 280  | -    | 26.01 | x 5  | -    | 1400 - 39.64   |
| " " " Right    | 20 x 14 | - | 280  | -    | 26.01 | x 5  | -    | 1400 - 39.64   |
| " " " Roof     | 17 x 21 | - | 357  | -    | 33.16 | x 5  | -    | 1785 - 50.54   |
| " 4 " Right    | 13 x 18 | - | 234  | -    | 21.74 | x 5  | -    | 1170 - 33.13   |
| " " " Centre   | 17 x 20 | - | 340  | -    | 31.58 | x 5  | -    | 1700 - 48.14   |
| " " " Left     | 7 x 20  | - | 140  | -    | 13.00 | x 5  | -    | 700 - 19.82    |
| " " " Pillar.  | 10 x 10 | - | 100  | -    | 9.29  | x 5  | -    | 500 - 14.16    |
| " 5 " Left (2) | 20 x 13 | - | 260  | -    | 24.32 | x 5  | -    | 1300 - 36.81   |
|                |         |   |      |      |       |      |      | 10495 - 297.17 |

6 Days  
Wages.

Tonnage to Mill:- 455 Tons.

Wages Paid:- £96: 17: 6.

Cost per Cu.M.:- 6s/6d.

**RODDERUP MINE & MILL  
MARCH 1940**

MINE. During the month 455 Tons of Ore was broken and crushed. The recovery amounted to 50.9 Tone of Concentrates, equal to 11.18% of the crude ore.

I have in recent letters referred to the lack of mechanical power necessary for increasing production and development on a small scale. Assuming that the increase of production is to amount to say 600 Tons of Ore monthly, and one Development drive, it is impossible to do this without either running the fuel Oil Engine or using Electricity for driving the small Broom & Wade compressor underground. Fuel Oil is now 50% dearer than in 1938. Also, we have only an old Schram Compressor outside and attached to the Fuel Oil Engine. This is low in efficiency, and was only left as a standby. By the terms of the Electricity Agreement, the Co. cannot use mly other power but Electricity to drive either of the Broom & Wade Compressors. I am referring to this again, as I consider it necessary to send a clear statement for consideration.

The mine position is unchanged. I have however recently referred to the fact that we are breaking the richest ore we can find and are not building up any reserves. This method may yield good results for months, or oven years, but it is not a sound position and any falling off in grade or cutting out of values, either by a fault or stringers, might cause much anxiety. I consider a certain amount of development should be done, even on a limited scale, and arrangements should be made to do this while the price of Lead Ore is fixed at £25. per ton.

MILL. The Mill generally is in good repair.



Note. April 4th.

Since writing the above, I have received a note from Mr Chaplain instructing me to increase the output as soon as possible and to use electric current in order to do so. I will proceed carefully and as soon as possible. First I must get an Electrician, and then arrange with the Electricity Co. to connect us to their mains. According to law "Daily Log Sheets" must be signed and tests made (see enclosed specimen sheet), miners must be found and these will not be easy to get. All young men who are fit and below 26 years of age have been called, or have notice that they will be required for the forces by certain dates. Wages have also all risen, most by Government decree or arrangement. I shall do my best to increase the output as soon as possible and at the best terms possible.

3

202

|     |        |
|-----|--------|
| 187 | 13/1.  |
| 126 | 13/12. |
| 297 | 6/11.  |

## Report of the Nenthead Mines April 1940

### REPORT of the NENTHEAD MINES

APRIL 1940.

|                     | <u>Nentsbury.</u> | <u>Rampall.</u>                                                                                                           | <u>Rodderup.</u> | <u>Totals.</u> |
|---------------------|-------------------|---------------------------------------------------------------------------------------------------------------------------|------------------|----------------|
| Ore Mined           | Nil.              | Machinery kept in good condition. A few parts of Jigs and tables that were inclined to perish have been used at Rodderup. | 566 Tons         | 566 Tons.      |
| Ore Milled          | "                 |                                                                                                                           | 566 "            | 566 "          |
| Lead Concs. prodcd. | "                 |                                                                                                                           | 63.55 "          | 63.55 "        |
| % of Galena         | "                 |                                                                                                                           | 11.22%           | 11.22%         |
| Hours Worked        | "                 |                                                                                                                           | 94 hours         | 94 hours.      |
| Tons per hour       | "                 |                                                                                                                           | 6.02             | 6.02 Tons.     |

### S T O C K S.

|                  | <u>Nentsbury.</u> | <u>Rampall.</u> | <u>Rodderup.</u>            | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|-----------------|-----------------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.            | Nil.                        | 2300 Tons        | 2300 Tons      |
| Blende-Witherite | 50 Tons           | Nil.            | 150 Tons<br>(mostly Blende) | Nil.             | 200 Tons.      |

Rough Blende.....NIL.  
Fine Blende.....NIL.

Galena at Nentsbury, 53.865 Tons, Potters Ore at Nentsbury, Nil.  
" " Rodderup, 139.210 Tons, Potters Ore at Rodderup, 169.331 Tons.

Note/ Since April 26th, the dry weight of the ore delivered to Messrs. Walkers Parker & Co. Ltd., Newcastle on Tyne has been settled. The dry weight was 156.805 Tons. This amount should be deducted from Rodderup to arrive at stocks in hand. All 3/5 and 1/5 mm. was despatched and the balance taken from Bulk Ore.

|          |                      |            |
|----------|----------------------|------------|
| Coal     | consumed at Rampall, | 1.50 Tons. |
| Fuel Oil | " " "                | 0.50 "     |
| "        | " " Nentsbury,       | Nil.       |
| "        | " " Rodderup,        | 3.50 "     |

COMPRESSED AIR produced at Rodderup from Water Power and the Fuel Oil Engine, amounted to about 500 cu.ft. per minute at 60 to 85 lbs. per square inch.

COMPRESSED AIR produced at Nenthead from Water Power amounted to about 450 cu.ft. per minute at Nenthead and 350 to 400 cu.ft. at Wellhope at about 75 lbs per square inch.

**NENTSBURY MINE & MILL**  
**APRIL 1940**

DEVELOPMENT IN THE FIRESTONE STRATUM. During the month, the drive E. from Wellhope shaft in the Firestone stratum was extended 20 feet, making a total distance driven E. from Wellhope Shaft, 112 feet. At this point a north and south Vein was intersected. The Vein, where cut, was 5 feet wide. There were slight traces of mineral visible. The Hanging Wall of this Vein was Firestone. The Footwall, not well-defined, was Plate, we commenced to rise on the Vein for the purpose of proving what effect the Vein had on the strata. Up to April 26th the rise was put up 28 feet on the inclination of the Vein. The Hanging Wall at the top of the rise had passed through the Firestones stratum, and also the Coal and Iron Bed. The rise at this height, was still in Plate in the Hanging wall. The vertical displacement of the strata is therefore equal to the thickness of the Firestone. Consequently, there is little hope of finding payable ore. (May 6th. From the 29th of April to May 3rd, the rise was put up a further 5 feet, making 33 feet in all on the inclination of the Vein. At that point (33 feet) the Firestone was cut in the Hanging Wall. The vertical throw is therefore approx. 25 feet. Letters posted on May 3rd fully explain the position.)

SALES OF LEAD ORE. The parcel of Lead Ore Concentrates sold to Messrs. Walker Parker Co., Ltd., Newcastle-on-Tyne, during the month, weighed, dry, 156.805 Tons. The nett value per ton, after deducting transport, is approx. 310/- per ton.

SALE OF AERIAL STANDARDS. We have not secured a Customer to purchase and dismantle the Aerial standards. Firms have declined to take them down and have written to know if the Company will take some of the Standards down and sell them. These companies seem to want only certain standards and in such lengths as suit them. We have not accepted any offer and would like your instructions. I consider the cost of dismantling will be about as much as these are likely to realise.

GENERAL. No new poles have been erected to carry the cable from Rampgill to Wellhope. This work must be done this summer otherwise we may have to pay damages.

RODDERUP FELL MINE - APRIL 1940.

DEVELOPMENT FOOTAGE:- Nil.

WEST FLATS.

T. Bushby & Partners.

273 Days Worked.

|            |        | L  | W    | S.F.  | S.M.    | H   | C.F.   | C.M.         |                   |
|------------|--------|----|------|-------|---------|-----|--------|--------------|-------------------|
| No. 3 Flat | Left   | 20 | x 14 | = 280 | - 26.01 | x 5 | = 1400 | = 39.64      | )                 |
| " " "      | Right  | 20 | x 15 | = 300 | - 27.37 | x 5 | = 1500 | = 42.47      | )                 |
| " " "      | Centre | 20 | x 13 | = 260 | - 24.15 | x 5 | = 1300 | = 36.81      | )                 |
| " 4 "      | "      | 29 | x 20 | = 580 | - 53.88 | x 5 | = 2900 | = 82.11      | ) Days Wages      |
| " " "      | Right  | 22 | x 19 | = 418 | - 38.83 | x 5 | = 2090 | = 59.18      | )                 |
| " " "      | Left   | 20 | x 21 | = 420 | - 39.02 | x 5 | = 2100 | = 59.46      | )                 |
| " " "      | Side   | 4  | x 12 | = 48  | - 4.46  | x 5 | = 240  | = 6.79       | )                 |
|            |        |    |      |       |         |     |        | <u>11530</u> | <u>= 326.46</u> ) |

Tons to Mill:- 566

Wages Paid:- £122: 2: 6.

Cost per Cu.M.:- 7s/6d.

**RODDERUP MINE & MILL  
APRIL 1940**

During the month, 566 Tons of Ore was mined and crushed. The recovery amounted to 63.55 Tone of Concentrates, equal to 11.22% of the Crude Ore. Fortunately we had a good supply of water and this, with the Fuel Oil Engine, enabled us to produce the above result. Only when Water is plentiful is this possible.

Having received instructions to increase the output at Rodderup, I engaged Mr. Brown, electrician, who was employed by us up to April 1939. He resumed duties on April 27th 1940. Commencing in May, the small Broom & Wade Compressor in Rodderup will be driven electrically, and during May we hope to further increase the output. This we can only do systematically and slowly, as the Flats can be opened up and miners obtained. I hope to able to do some Development directly miners can be spared and power obtainable constantly. The mine position is unchanged generally. At the end of May, if all goes well, I shall be able to see more clearly what steps to take re: Development, and what we can produce in the form of crude ore monthly without lowering the percentage recovered.

MILL. The Mill is maintained in good condition.

CAMPBELL FUEL OIL ENGINE. On April 24th, the bevelled skew gear driving the Governor of this engine, stripped. Consequently, the Engine has not run since that date. The damage, covered by Insurance, will be repaired by May 11th if the makers keep their promise.

GENERAL. To enable us to re-roof the shed in which the Lead Concentrates are stored, a request was made that all the ore should be sold as soon as possible. Big scales of rust (iron oxide mainly) is daily dropping on the Concentrates. The material for roofing is on the premises. We dare not touch the roof until all the ore is cleared because the whole roof will collapse.





## Report of the Nenthead Mines May 1940

### REPORT OF THE NENTHEAD MINES

MAY 1940.

|                      | <u>Nentsbury.</u> | <u>Rampgill.</u>                        | <u>Rodderup.</u> | <u>Totals.</u> |
|----------------------|-------------------|-----------------------------------------|------------------|----------------|
| Ore Mined            | Nil.              | Machinery kept in reasonable condition. | 755 Tons         | 755 Tons.      |
| Ore Milled           | Nil.              |                                         | 755 "            | 755 "          |
| Lead Concs. produced | Nil.              |                                         | 82.5 "           | 82.5 "         |
| % of Galena          | Nil.              |                                         | 10.93%           | 10.93%         |
| Hours Worked         | Nil.              |                                         | 128 Hours        | 128 Hours.     |
| Tons per hour        | Nil.              |                                         | 5.9 Tons         | 5.9 Tons.      |

### S T O C K S.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>         | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|--------------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.                     | 2300 Tons        | 2300 Tons.     |
| Blende-Witherite | 50 Tons           | Nil.             | 150 Tons (mostly Blende) | Nil.             | 200 Tons.      |

Rough Blende: Nil.  
Fine Blende: Nil.

Galena at Nentsbury, 53.865 Tons, Potters Ore at Nentsbury, Nil.  
" " Rodderup, Nil. , " " Rodderup, 18.68 Tons

Note/ A parcel of ore, equal to 263.056 metric tons, was sold to Messrs. Walkers, Parker & Co. Ltd., Newcastle, during the month. Payment was received May 25th.

|          |                       |            |
|----------|-----------------------|------------|
| Coal     | consumed at Rampgill, | 1.25 Tons  |
| Fuel Oil | " " " "               | 0.50 "     |
| Fuel Oil | " " Nentsbury,        | Nil.       |
| Fuel Oil | " " Rodderup,         | 1.50 Tons. |

COMPRESSED AIR produced at Nenthead, up to May 4th, was from Water Power. Since that date the Compressor has not been in operation.

COMPRESSED AIR produced at Rodderup, partly from Water Power and from Electric Power. Quantity of Compressed Air produced 450 to 550 cu. ft. per minute at 80 to 85 lbs pressure per square inch.

**NENTSBURY MINE & MILL**  
**MAY 1940**

DEVELOPMENT IN THE FIRESTONE STRATUM. The Rise in the Vein, In the level E. of Wellhope shaft, was put up from 28 feet on the inclination of the Vein to 33 feet on the inclination of the Vein. The vertical height is approx. 25 feet. At that height the Firestone was cut in the Footwall. No mineral was exposed. The Hanging wall was then in place and the Footwall in Firestone. The outlook for finding mineral was so bad that all work was stopped on May 4th. Materials such as buckets etc. have since been removed and placed in the store, and the Steel taken to Rodderup Fell.

After work was stopped at Wellhope the miners, under the foreman were employed covering 3 shafts which has collapsed, repairing the arches in Nentsbury Main Level, and removing the broken poles carrying the cable from Nenthead to Wellhope Shaft, and later in the month raising the banks of the bottom reservoir at Rodderup.

SALE OF LEAD ORE. A further parcel of Lead Ore was sold to Messrs. Walkers Parker & Co. Ltd., Newcastle, on the same terms and conditions as previous parcels. The weight of the parcel was 263.056 Metric Tons. The nett price, after deducting carriage and analysts' charges, was 308/- per ton.

Messrs. Walkers Parker & Co. Ltd have agreed to take another consignment on the same terms and conditions when ready.

SALE OF GRAVEL. Road repairs are kept at a minimum. Consequently the sale of gravel is restricted. Transport problems are becoming difficult.

GENERAL. Please note the broken poles at Wellhope have been removed, not replaced, and the cable stored. Before this line could again be put into use, new poles must be erected. The cable is stored and can be used.

**RODDERUP MINE & MILL**  
**MAY 1940**

During the month, 755 Tons of Ore was mined and crushed for a recovery of 82.5 Tons of Concentrates equal to 10.93% of Crude Ore.

Every effort has been made to Increase the output.

The small Broom & Wade Compressor was put into commission on May 1st, and the output of crude ore was increased from that date, with a corresponding increase in the output of concentrates. From an output of 50.9 Tons in March to 63.55 Tons in April, the output was increased to 82.5 Tons in May.

It must be clearly understood that we are concentrating on increasing the output. This is in accordance with instructions received and also with orders issued to all mines and industrial concerns in Great Britain. It may be possible to increase still more, but care must be exercised not to increase to such a degree that the result is a working loss. We are working mainly in the richest places in the mine.

Re: DEVELOPMENT. It has not been possible to date to obtain sufficient miners to increase the output and develop as suggested. If it is possible the development drive will be commenced during June.

Generally the mine position is unchanged. The grade of ore mined will vary sometimes. The ore in the top 5 to 6 feet of the Limestone, North of the Fault, seems to be fairly consistent in grade and is better than the Ore on the South side of the Fault.

CAMPBELL FUEL OIL ENGINE. This has now been put in order. The cost of the new parts was paid by the Insurance Co.

GENERAL. The Lead Ore Shed has been re-roofed, and is now in excellent condition. All the ore was cleaned out and sold, except some 5/15 mm. Potters Ore, which was taken to Rampgill and stored there, since when some has been sold to Messrs. Morris Ashby and negotiations are proceeding for the sale of more of this ore.

RODDERUP MINE

MAY 1900.

DEVELOPMENT FOOTAGE:- **Nil.**

WEST CENTRAL PLATS.

T. Eushby & Partners,

275<sup>1</sup>/<sub>2</sub> days Worked.

|            |        | L  | W    | S.F.             | C.M.               | H   | C.F.              | C.M.               |   |
|------------|--------|----|------|------------------|--------------------|-----|-------------------|--------------------|---|
| No.2 Flat. |        | 11 | x 12 | - 132            | - 12.26            | x 5 | - 660             | - 18.69            | ) |
| No.3       |        | 10 | x 16 | - 160            | - 14.86            | x 5 | - 800             | - 22.65            | ) |
| "          |        | 10 | x 10 | - 100            | - 9.29             | x 5 | - 500             | - 14.16            | ) |
| "          |        | 8  | x 10 | - 80             | - 7.43             | x 5 | - 400             | - 11.32            | ) |
| No.4       |        | 12 | x 22 | - 264            | - 24.52            | x 5 | - 1320            | - 37.37            | ) |
| "          | Side   | 5  | x 10 | - 50             | - 4.64             | x 5 | - 250             | - 7.08             | ) |
| "          | "      | 6  | x 10 | - 60             | - 5.57             | x 5 | - 300             | - 8.49             | ) |
| "          | "      | 25 | x 19 | - <del>475</del> | - <del>44.13</del> | x 5 | - <del>2375</del> | - 67.25            | ) |
| "          | "      | 13 | x 15 | - 195            | - 18.12            | x 5 | - <del>975</del>  | - <del>27.61</del> | ) |
| "          | "      | 13 | x 12 | - 156            | - 14.49            | x 5 | - 780             | - 22.08            | ) |
| "          | Pillar | 3  | x 13 | - 39             | - 3.62             | x 5 | - 195             | - 5.52             | ) |
| No.3       | Roof   | 22 | x 20 | - 440            | - 40.88            | x 5 | - 2200            | - 62.29            | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    | ) |
|            |        |    |      |                  |                    |     |                   |                    |   |



REPORT OF THE NENTHEAD MINES  
 000000 00 000 0000000000000 00000000

JUNE 1940  
 000000 000000

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u>          | <u>Rodderup.</u> | <u>Total.</u> |
|-------------------|-------------------|---------------------------|------------------|---------------|
| Ore Mined         | Nil.              | Machinery kept in         | 850 Tons         | 850 Tons.     |
| Ore Milled        | Nil.              | reasonable condition.     | 850 "            | 850 "         |
| Lead Concs. prcd. | Nil.              | Parts of some of the      | 88.1 "           | 88.1 "        |
| % of Galena       | Nil.              | concentrating tables have | 10.36%           | 10.36%        |
| Hours Worked      | Nil.              | been taken to Rodderup.   | 158 hours        | 158 hours.    |
| Tons per hour     | Nil.              |                           | 5.38             | 5.38          |

STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>         | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|--------------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.                     | 2300 Tons        | 2300 Tons.     |
| Blende-Witherite | 50 Tons.          | Nil.             | 150 Tons (mostly Belnde) | Nil.             | 200 Tons.      |

Rough Blende...Nil.  
 Fine Blende....Nil.

Galena at Nentsbury, Nil. Potters Ore at Nentsbury, Nil.  
 " " Rodderup, 8.00 Tons, Potters Ore at Rodderup, 2.43 Tons.

Note: A parcel of ore equal to 150.215 Tons (metric) was sold to Messrs. Walkers, Parker & Co. Ltd., Newcastle, during the month. Payment was received before the 26th June.

Coal consumed at Rampgill, 1.25 Tons.  
 Fuel Oil " " " 0.50 "  
 " " " Nentsbury, Nil.  
 " " " Rodderup, 1.50 " .

COMPRESSED AIR produced at Nenthead, Nil.

COMPRESSED AIR produced at Rodderup from Water Power and Electricity amounted to 550 to 600 cu.ft. per minute at a pressure in the mine of 80 to 85 lbs. per sq. inch.

## **NENTHEAD MINES**

### **JUNE 1940**

NENTSBURY MINE. Mine Closed. On instructions received from Mr. Chaplain the men, not willing in work at Rodderup, were paid off. Neither the foreman nor the miners had any difficulty in finding work elsewhere at higher wages.

Daring June no inspection of the mine has been made and cannot be until a foreman and miner are employed to carry out the work.

RODERRUP FELL. During the month, 850 Tons of Ore was mined and crushed for a recovery of 88.1 Tons of Concentrates equal to 10.36%. It was expected that when more Flats were opened up to increase the output, the percentage recovered would be lower. The mine outlook is unchanged.

DEVELOPMENT. About 20 feet of development was done in a drive in a North Westerly direction on Fault No.5. It was considered that by turning from almost N. to N.W. the drive would pass through the fault and payable ore would be found on the W. side. After driving 20 feet it was found by Survey that Fault No.3 on Plan took a sharp turn N. a few feet W. of the drive and intersected Fault No.5. The influence of these Faults threw the Strata down. Consequently on the N. side the Limestone was mainly below the level of the drive. Work was stopped at once. A new Development drive will be made later - see attached report of my visit to London to give evidence before the Non-Ferrous Metallic Ores Committee.

MILL. The Mill is in good condition.



RODDERUP MINE - JUNE 1940.

DEVELOPMENT FOOTAGE:- 20 feet.

---

Development.

T.W.Richardson & Partner.

19 Days Worked.

Drive. L W S.F. S.M. H. C.F. C.M.  
20. x 5 - 100 - 9.29 x 7 - 700 - 19.82 @ Days Wages.

Wages Paid: £8. 2s. 0.

Cost per Cu.M.:- 8s/1d.

---

West Central Flats.

T. Dushby & Partners.

365½ Days Worked.

|            | L  | W    | S.F.  | S.M.    | H   | C.F.         | C.M.            |                |
|------------|----|------|-------|---------|-----|--------------|-----------------|----------------|
| No. 3 Flat | 22 | x 21 | - 462 | - 42.92 | x 5 | - 2310       | - 65.41         | )              |
| " " "      | 15 | x 11 | - 165 | - 15.33 | x 5 | - 825        | - 23.36         | )              |
| " 4 "      | 22 | x 24 | - 528 | - 49.05 | x 5 | - 2640       | - 74.75         | )              |
| " " "      | 28 | x 22 | - 576 | - 53.51 | x 5 | - 2880       | - 81.55         | ) @ Days Wages |
| " " Pillar | 15 | x 12 | - 180 | - 16.72 | x 5 | - 900        | - 25.48         | )              |
| " " "      | 10 | x 11 | - 110 | - 10.22 | x 5 | - 550        | - 15.57         | )              |
| " " Flat   | 12 | x 20 | - 240 | - 22.29 | x 5 | - 1200       | - 33.98         | )              |
| " " "      | 14 | x 18 | - 252 | - 23.41 | x 5 | - 1260       | - 35.68         | )              |
|            |    |      |       |         |     | <u>12565</u> | <u>- 355.78</u> | )              |

Tonnage to Mill:- 850

Wages Paid:- £167. 1s. 0d.

Cost per Cu.M.:- 9s/4d.

---

# MINE STATISTICS

1940.

June

| Tons of Ore Mined. | Cubic Metres Cut |  |       |  | Tons per Cubic Metre |  |          |  | Days Worked. |  |        |  |          |  |           |  | Tons per Miner's Day |  |        |  | Cubic Metres per Miner's Day |  |       |  | Per Underground Man |  | Wages paid per Miner's Day |  | Wages paid per Underground Man |  | Wages paid per Cubic Metre |  | No. of Drills Working |  | Dynamite |  |       |  |          |  |       |  |      |  |         |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |
|--------------------|------------------|--|-------|--|----------------------|--|----------|--|--------------|--|--------|--|----------|--|-----------|--|----------------------|--|--------|--|------------------------------|--|-------|--|---------------------|--|----------------------------|--|--------------------------------|--|----------------------------|--|-----------------------|--|----------|--|-------|--|----------|--|-------|--|------|--|---------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|----------|--|--------|--|
|                    | Dev.             |  | Total |  | In Ore               |  | In Deads |  | Total        |  | Miners |  |          |  | Labourers |  |                      |  | In Ore |  | In Deads                     |  | Total |  | Bar.                |  | Wages                      |  | Gain                           |  | Total                      |  | In Ore                |  | In Deads |  | Total |  | Headings |  | Total |  | lbs. |  | per ton |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |          |  |        |  |
|                    |                  |  |       |  |                      |  |          |  |              |  | In Ore |  | In Deads |  | In Ore    |  | In Deads             |  |        |  |                              |  |       |  |                     |  |                            |  |                                |  |                            |  |                       |  |          |  |       |  |          |  |       |  |      |  |         |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  | In Deads |  | In Ore |  |

## COMPARATIVE STATEMENT.

Nentsbury Nentsbury Rodderup

Nentsbury Tons in Deads

Rodderup Tons in Deads

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 187          | 13/1          | 187          | 13/1          |
| February  | 126          | 13/10         | 126          | 13/10         |
| March     | 297          | 10/11         | 297          | 10/11         |
| April     | 326          | 9/10          | 326          | 9/10          |
| May       | 304          | 10/10         | 304          | 10/10         |
| June      | 370          | 10/14         | 370          | 10/14         |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings as ascertained in your letter of 3rd June, 1932

Nentsbury

|     |          |
|-----|----------|
| ... | Mos. Av. |
| ... | Mos. Av. |

## Report of Nenthead Mines July 1940

### REPORT OF NENTHEAD MINES

JULY 1940.

|                      | <u>Nentsbury.</u> | <u>Rampgill.</u>                                                             | <u>Rodderup.</u> | <u>Total.</u> |
|----------------------|-------------------|------------------------------------------------------------------------------|------------------|---------------|
| Ore Mined            | Nil.              | Machinery kept in as good a condition as possible with the labour available. | 825 Tons.        | 825 Tons.     |
| Ore Milled           | Nil.              |                                                                              | 825 "            | 825 "         |
| Lead Concs. produced | Nil.              |                                                                              | 85.55 "          | 85.55 "       |
| % of Galena          | Nil.              |                                                                              | 10.37%           | 10.37%        |
| Hours Worked         | Nil.              |                                                                              | 161 Hours.       | 161 Hours.    |
| Tons per Hour        | Nil.              |                                                                              | 5.32             | 5.32          |

### S T O C K S.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>         | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|--------------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.                     | 2300 Tons        | 2300 Tons.     |
| Blende-Witherite | 50 Tons.          | Nil.             | 150 Tons (mostly Blende) | Nil.             | 200 "          |

Rough Blende..... Nil.  
Fine Blende..... Nil.

Galena at Nentsbury, Nil.      Potters Ore at Nentsbury, Nil.  
" " Rodderup, 81.05 Tons.      " " Rodderup, 9.93 Tons.

NOTE:- A parcel of ore of about 120-125 Tons was delivered to Messrs. Walkers, Parker & Co. Ltd., Newcastle, during the latter part of July. Particulars are not yet to hand.

|          |                       |            |
|----------|-----------------------|------------|
| Coal     | consumed at Rampgill, | 1.25 Tons. |
| Fuel Oil | " " "                 | 0.50 "     |
| "        | " " Nentsbury,        | Nil.       |
| "        | " " Rodderup,         | 1.50 Tons. |

COMPRESSED AIR produced at Nenthead, Nil.

COMPRESSED AIR produced at Rodderup from Water-power & Electricity,  
600 cu. ft. per minute at a pressure of 85 lbs. per square inch in the mine.

## **NENTHEAD MINES JULY 1940**

NENTSBURY MINE. Mine closed. Whenever possible the odd men employed have cleared two falls in Nentsbury Main Level.

RODDERUP FELL MINE. During the month 825 Tons of ore was mined and crushed for a recovery of 85.55 Tons of Concentrates.  
The percentage recovered per ton of ore was 10.37%  
General conditions in the mine show little change.

DEVELOPMENT. Owing to the scarcity of labour no development has been done. Representatives from the Non-Ferrous Metallic Ores Committee have inspected the mine and the question of development fully considered. I pointed out that the Company was doing all that was possible with the means at their disposal, and that it was unreasonable to force the Company to carry out excess development if it meant that the Company would lose money. I suggested that the Government should supply the money necessary to drive two development X-cuts W. of No.5 Shaft in the Tyne-bottom Limestone, which is above the horizon of the main level. The Engineers considered some assistance should be given the Company, and intimated they would recommend to the Government that the Company should drive one X-cut at their own expense, and the Government meet the cost monthly of driving another.

If this offer is made I shall accept it. In any case the Company must drive one to maintain the supply of ore to the Mill, and if the Government will bear the cost of another, the mine ore reserves should be kept well ahead of the mill requirements. The suggestion made by the Engineers was that no return of capital provided by the Government would be asked for.  
No decision has yet been made.

MILL. The Mill is in good condition

R O D D E R U P      M I N E

JULY 1940.

Development Footage: 13 feet.

WEST CENTRAL FLATS.

Development.

T. Richardson & Partners.

18 days worked.

Forebreast    L    W    S.F. S.M.    H    C.F.    C.M.    )  
13 x 5 - 65 - 6.04 x 7 - 455 - 12.88 ) @ Days Wages.

Wages Paid:- £7:13: 0.

Cost per Cu.M.:- 11/10½.

Heading.

T. Bushby & Partners.

360½ days worked.

|            | L       | W | S.F. | S.M. | H     | C.F.  | C.M.         | )                       |
|------------|---------|---|------|------|-------|-------|--------------|-------------------------|
| No.3 Flat  | 9 x 14  | - | 126  | -    | 11.70 | x 5 - | 630          | - 17.84 )               |
| " 4 "      | 15 x 11 | - | 165  | -    | 15.33 | x 5 - | 825          | - 23.36 )               |
| " " "      | 15 x 18 | - | 270  | -    | 25.08 | x 5 - | 1350         | - 38.22 )               |
| " " "      | 20 x 18 | - | 360  | -    | 33.44 | x 5 - | 1800         | - 50.97 )               |
| " " "      | 24 x 17 | - | 408  | -    | 37.90 | x 5 - | 2040         | - 57.76 ) @ Days Wages. |
| " " "      | 10 x 22 | - | 220  | -    | 20.44 | x 5 - | 1100         | - 31.15 )               |
| " " "      | 11 x 12 | - | 132  | -    | 12.26 | x 5 - | 660          | - 18.69 )               |
| " " Pillar | 10 x 8  | - | 80   | -    | 7.43  | x 5 - | 400          | - 11.32 )               |
| " " "      | 7 x 8   | - | 56   | -    | 5.20  | x 5 - | 280          | - 7.93 )                |
| " " Flat   | 20 x 22 | - | 440  | -    | 40.88 | x 5 - | 2200         | - 62.29 )               |
| No.5 Flat  | 11 x 11 | - | 121  | -    | 11.24 | x 9 - | 1089         | - 30.83 )               |
| " " Pillar | 10 x 10 | - | 100  | -    | 9.29  | x 8 - | 800          | - 22.65 )               |
| " " Canch. | 12 x 6  | - | 72   | -    | 6.69  | x 4 - | 288          | - 8.15 )                |
|            |         |   |      |      |       |       | <u>13462</u> | <u>- 381.16 )</u>       |

Tonnage to Mill:- 825

Wages Paid:- £166: 2: 9.

Cost per Cu.M.:- 8/8½.

# MINE STATISTICS

July 1940.

|             | Tons of Ore Mined. |      |       | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked. |          |       |           |          |       | Tons per Miner's Day |          |       | Cubic Metres per Miner's Day |       |              | Per Underground Man |          |      | Wages paid per Miner's Day |          |       | Wages paid per Underground Man |       |      | Wages paid per Cubic Metre |      |       | No. of Drills Working |  |  | Dynamite |  |
|-------------|--------------------|------|-------|------------------|----------|-------|----------------------|----------|-------|--------------|----------|-------|-----------|----------|-------|----------------------|----------|-------|------------------------------|-------|--------------|---------------------|----------|------|----------------------------|----------|-------|--------------------------------|-------|------|----------------------------|------|-------|-----------------------|--|--|----------|--|
|             | Headings.          | Dev. | Total | In Ore           | In Deads | Total | In Ore               | In Deads | Total | Miners       |          |       | Labourers |          |       | In Ore               | In Deads | Total | In Ore                       | Total | Cubic Metres | Tons                | Headings | Dev. | Total                      | Headings | Total | Headings                       | Total | lbs. | per ton                    |      |       |                       |  |  |          |  |
|             |                    |      |       |                  |          |       |                      |          |       | In Ore       | In Deads | Total | In Ore    | In Deads | Total |                      |          |       |                              |       |              |                     |          |      |                            |          |       |                                |       |      |                            | Bar. | Wages | gains                 |  |  |          |  |
| Nentsbury   |                    |      |       |                  |          |       |                      |          |       |              |          |       |           |          |       |                      |          |       |                              |       |              |                     |          |      |                            |          |       |                                |       |      |                            |      |       |                       |  |  |          |  |
| ...Mos. Av. |                    |      |       |                  |          |       |                      |          |       |              |          |       |           |          |       |                      |          |       |                              |       |              |                     |          |      |                            |          |       |                                |       |      |                            |      |       |                       |  |  |          |  |
| ...Mos. Av. |                    |      |       |                  |          |       |                      |          |       |              |          |       |           |          |       |                      |          |       |                              |       |              |                     |          |      |                            |          |       |                                |       |      |                            |      |       |                       |  |  |          |  |
| Rodderup    | 805                | -    | 815   | 361              | 13       | 394   | 2.11                 | -        | 2.11  | 18           | 89       | -     | 408       | -        | 408   | 2.28                 | 2.18     | 1.05  | 1.04                         | 1.70  | 0.84         | 9.25                | 8.10     | 9.12 | 8.10                       | 10.15    | 10.15 | 5.1                            | 7     | 940  | 1.21                       |      |       |                       |  |  |          |  |
| ...Mos. Av. | 505                | -    | 505   | 216              | 3        | 219   | 2.10                 | -        | 2.10  | 3            | 54       | -     | 315       | -        | 315   | 2.10                 | 2.14     | 1.01  | 1.01                         | 1.70  | 0.85         | 8.11                | 8.10     | 8.11 | 8.15                       | 10.17    | 10.17 | 4.11                           | 5     | 564  | 0.40                       |      |       |                       |  |  |          |  |
| ...Mos. Av. | 1002               | -    | 1002  | 453              | 4        | 457   | 2.11                 | -        | 2.11  | 5            | 64       | -     | 337       | -        | 337   | 2.18                 | 2.14     | 1.02  | 1.01                         | 1.70  | 0.85         | 8.11                | 8.10     | 8.11 | 8.15                       | 10.17    | 10.17 | 4.11                           | 5     | 630  | 1.00                       |      |       |                       |  |  |          |  |

## COMPARATIVE STATEMENT.

Nentsbury ... Tons in Deads ...  
Rodderup ... Tons in Deads ...

Nentsbury ... Rodderup ...

Wages paid per Cubic Metre in Headings as suggested by your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 187          | 13/1          |              |               |
| February  | 120          | 13/10         |              |               |
| March     | 247          | 16/11         |              |               |
| April     | 324          | 8/10          |              |               |
| May       | 504          | 10/10         |              |               |
| June      | 376          | 10/9          |              |               |
| July      | 344          | 10/5          |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report of Nenthead Mines August 1940

### REPORT OF NENTHEAD MINES

AUGUST 1940.

|                      | <u>Nentsbury.</u> | <u>Rampgill.</u>                                                             | <u>Rodderup.</u> | <u>Totals.</u> |
|----------------------|-------------------|------------------------------------------------------------------------------|------------------|----------------|
| Ore Mined            | Nil.              | Machinery kept in as good a condition as possible with the labour available. | 805 Tons.        | 805 Tons.      |
| Ore Milled           | Nil.              |                                                                              | 805 "            | 805 "          |
| Lead Concs. produced | Nil.              |                                                                              | 82 "             | 82 "           |
| % of Galena          | Nil.              |                                                                              | 10.18%           | 10.18%         |
| Hours Worked         | Nil.              |                                                                              | 156 hrs.         | 156 hrs.       |
| Tons per hour        | Nil.              |                                                                              | 5.13             | 5.13           |

### S T O C K S.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>              | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|-------------------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.                          | 2300 Tons.       | 2300 Tons.     |
| Blende-Witherite | 50 Tons           | Nil.             | 150 Tons<br>(Blende app. 28%) | Nil.             | 200 "          |

Rough Blende.....Nil.  
Fine Blende.....Nil.

Galena at Nentsbury, Nil.      Potters Ore at Nentsbury, Nil.  
"      Rodderup, 34.75 Tons.      "      "      Rodderup, 15.222 Tons.

|           |                          |            |
|-----------|--------------------------|------------|
| COAL,     | consumed at Rampgill,    | 1.25 Tons. |
| FUEL OIL, | "      "      "          | 0.50 "     |
| "      "  | "      "      Nentsbury, | Nil.       |
| "      "  | "      "      Rodderup,  | 1.00 " .   |

COMPRESSED AIR produced at Nenthead, NIL.

COMPRESSED AIR produced at Rodderup, from Water Power & Electricity, 650 cu.ft. per minute, at a pressure of 85 lbs. per square inch in the mine.



## **NENTHEAD MINES**

### **AUGUST 1940**

NENTSBURY MINE. Mine closed. During the month, Dr. K.C Dunham of H.M. Geological Survey, and Mr. L.B. Williams, Mining Engineer for the British Non-Ferrous Metallic Ores Committee, have inspected the mine very carefully and prepared reports for the Committee. The object of their inspection was to report to the Committee, if Nentsbury reserve of Mixed Ore (Blende—Witherite) could be worked in the interests of the Country. No decision has yet been reached. The general position in the Co.'s interest and in the Country's interest has been considered. I have written H.M. Inspector of Taxes, enquiring whether in the event of the Co. making a profit if the ores in reserve were worked, the British Government would take such profits. If so, should the ores which the Co. has paid to develop be worked out, the Co. would be left, so far as Nentsbury is concerned, with neither ore nor the equivalent in cash. The matter has not yet been settled.

RODDERUP FELL. During the month, 805 Tons of ore was mined and crushed, and 82.00 Tons of Galena Concentrates recovered, the recovery being 10.18%. The mine generally shows little change.

DEVELOPMENT. Preparations have been made to commence driving one development forebreast W. of No.3 Shaft and in a Northerly direction, to prove if the area W. of where the Flats are now worked continues. I hoped the Non-Ferrous Ores Committee would have agreed to bear the cost of a second drive N., further W. and nearer the West Cross-course, but to date, no decision has been reached. The prospect of finding payable ore in the Western area is considered good. The Engineers for the Non-Ferrous Ores Committee, and Dr. Dunham, agree that this area should be developed.

MILL. In good condition.

FLUOR SPAR. We have not yet sold any Fluor Spar. Enquiries have been sent to several firms.

SALE OF GRAVEL. We have been successful in selling over 222 Tons during August.

GENERAL. The returns from Rodderup are now bearing all costs of the Nenthead Agency and leaving a small margin of profit. The labour shortage is acute.

RODDERUP FELL MINE - AUGUST 1940.

Development Footage:- NIL.

WEST CENTRAL FLATS.

T. Bushby & Partners.

342 Days Worked.

|                      | L. | W.   | S.F.  | S.M.    | H.  | C.F.         | C.M.            |   |
|----------------------|----|------|-------|---------|-----|--------------|-----------------|---|
| No.3 Flat            | 24 | x 21 | - 504 | - 46.82 | x 5 | - 2520       | - 71.35         | ) |
| " " Pillar           | 10 | x 10 | - 100 | - 9.29  | x 5 | - 500        | - 14.16         | ) |
| " 4 Flat             | 5  | x 14 | - 70  | - 6.50  | x 5 | - 350        | - 9.91          | ) |
| " " "                | 21 | x 24 | - 504 | - 46.82 | x 5 | - 2520       | - 71.35         | ) |
| " " "                | 16 | x 20 | - 320 | - 29.73 | x 5 | - 1600       | - 45.30         | ) |
| " " "                | 21 | x 20 | - 420 | - 39.02 | x 5 | - 2100       | - 59.46         | ) |
| " 5 Flat             | 11 | x 18 | - 198 | - 18.39 | x 5 | - 990        | - 28.03         | ) |
| " " "                | 14 | x 7  | - 98  | - 9.10  | x 7 | - 686        | - 19.43         | ) |
| " " Canch<br>(Deads) | 33 | x 6  | - 198 | - 18.39 | x 4 | - 792        | - 22.43         | ) |
|                      |    |      |       |         |     | <u>12058</u> | <u>- 341.42</u> | ) |

6 Days Wages.

Tonnage to Mill:- 805

Wages Paid 2163: 7s: -d.

Cost per Cu.M.:- 9s/7d.

Blackburn Level - Fluor Spar.

Wm. Watson & Partner.

11½ Days Worked.

|         |    |      |      |        |     |            |                |   |
|---------|----|------|------|--------|-----|------------|----------------|---|
| Heading | 14 | x 3  | - 42 | - 3.90 | x 7 | - 294      | - 8.32         | ) |
| Rise    | 7  | x 14 | - 28 | - 2.60 | x 8 | - 224      | - 6.34         | ) |
|         |    |      |      |        |     | <u>518</u> | <u>- 14.66</u> | ) |

6 Days Wages.

Tonnage to Mill:- Nil.

Wages Paid £5:11s: 8d.

Cost per Cu.M.:- 7s/7d.

MINE STATISTICS.....August..... 1940.

| Tons of Ore Mined. |   |     | Cubic Metres Cut |    |     | Tons per Cubic Metre |   |     | Days Worked. |    |    |           |     |   | Tons per Miner's Day |     |     | Wages paid per Miner's Day |     |     | Wages paid per Underground Man |     |     | Wages paid per Cubic Metre |     |     | No. of Drills Working |     |     | Dynamite  |     |     |
|--------------------|---|-----|------------------|----|-----|----------------------|---|-----|--------------|----|----|-----------|-----|---|----------------------|-----|-----|----------------------------|-----|-----|--------------------------------|-----|-----|----------------------------|-----|-----|-----------------------|-----|-----|-----------|-----|-----|
|                    |   |     |                  |    |     |                      |   |     |              |    |    |           |     |   |                      |     |     |                            |     |     |                                |     |     |                            |     |     |                       |     |     |           |     |     |
| Headings.          |   |     | In Ore           |    |     | In Ore               |   |     | In Ore       |    |    | In Ore    |     |   | In Ore               |     |     | In Ore                     |     |     | In Ore                         |     |     | In Ore                     |     |     | In Ore                |     |     | In Ore    |     |     |
| Dev.               |   |     | Total            |    |     | Total                |   |     | Total        |    |    | Total     |     |   | Total                |     |     | Total                      |     |     | Total                          |     |     | Total                      |     |     | Total                 |     |     | Total     |     |     |
| Nentsbury          |   |     | Nentsbury        |    |     | Nentsbury            |   |     | Nentsbury    |    |    | Nentsbury |     |   | Nentsbury            |     |     | Nentsbury                  |     |     | Nentsbury                      |     |     | Nentsbury                  |     |     | Nentsbury             |     |     | Nentsbury |     |     |
| 805                | - | 805 | 341              | 15 | 356 | 236                  | - | 236 | 342          | 12 | 58 | -         | 412 | - | 412                  | 235 | 221 | 100                        | 100 | 100 | 100                            | 100 | 100 | 100                        | 100 | 100 | 100                   | 100 | 100 | 100       | 100 | 100 |
| 602                | - | 602 | 283              | 4  | 287 | 211                  | - | 211 | 273          | 5  | 54 | -         | 337 | - | 337                  | 218 | 214 | 102                        | 101 | 101 | 101                            | 101 | 101 | 101                        | 101 | 101 | 101                   | 101 | 101 | 101       | 101 | 101 |
| 627                | - | 627 | 290              | 5  | 295 | 214                  | - | 214 | 281          | 10 | 54 | -         | 340 | - | 340                  | 226 | 215 | 102                        | 101 | 101 | 101                            | 101 | 101 | 101                        | 101 | 101 | 101                   | 101 | 101 | 101       | 101 | 101 |

COMPARATIVE STATEMENT.

|           |       |                |       |           |       |          |       |
|-----------|-------|----------------|-------|-----------|-------|----------|-------|
| Nentsbury | ..... | Tons in Deaths | ..... | Nentsbury | ..... | Rodderup | ..... |
| Rodderup  | ..... | Tons in Deaths | ..... | Nentsbury | ..... | Rodderup | ..... |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 187          | 13/11.        | 187          | 13/11.        |
| February  | 126          | 13/6.         | 126          | 13/6.         |
| March     | 297          | 10/11.        | 297          | 10/11.        |
| April     | 326          | 8/10.         | 326          | 8/10.         |
| May       | 304          | 10/6.         | 304          | 10/6.         |
| June      | 376          | 10/4.         | 376          | 10/4.         |
| July      | 344          | 10/5.         | 344          | 10/5.         |
| August    | 356          | 10/8.         | 356          | 10/8.         |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

|                                                                                       |  |
|---------------------------------------------------------------------------------------|--|
| Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932. |  |
| Nentsbury                                                                             |  |
| ... Mos. Av.                                                                          |  |
| ... Mos. Av.                                                                          |  |

# Report of Nenthead Mines September 1940

REPORT OF NENTHEAD  
 ~~~~~

MINES  
 ~~~~~

SEPTEMBER  
 ~~~~~

1940.  
 ~~~~~

|                    | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------|-------------------|------------------|------------------|----------------|
| Ore Mined          | Nil.              | Machinery        | 867 Tons.        | 867 Tons.      |
| Ore Milled         | Nil.              | maintained       |                  |                |
| Lead Concs. Procd. | Nil.              | in fair          | 867 "            | 867 "          |
| % of Galena        | Nil.              | condition.       |                  |                |
| Hours Worked       | Nil.              | Belts are        | 88.15 "          | 88.15 "        |
| Tons per hour      | Nil.              | taken from       |                  |                |
|                    |                   | Rampgill         | 10.17%           | 10.17%         |
|                    |                   | to Rodderup.     |                  |                |
|                    |                   |                  | 171 hours        | 171 hours.     |
|                    |                   |                  | 5.07             | 5.07           |

## S T O C K S .

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>  | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|-------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.              | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | 50 Tons.          | Nil.             | 150 Tons          | Nil.             | 200 Tons.      |
|                  |                   |                  | (Blende app. 28%) |                  |                |

Rough Blende..... Nil.  
 Fine Blende..... Nil.

Galena at Nentsbury, Nil. Potters Ore at Nentsbury, Nil.  
 " " Rodderup, 21.20 Tons. " " " Rodderup, 16.161 Tons.

COAL, consumed at Rampgill, 1.00 Tons.  
 FUEL OIL, " " " 0.50 "  
 " " " " Nentsbury, Nil.  
 " " " " Rodderup 0.75 "

COMPRESSED AIR produced at Nenthead, NIL.

COMPRESSED AIR produced at Rodderup from Water Power & Electricity,  
 700 cu.ft. per min. at a pressure of 85 lbs. per square inch at the  
 face.

## **NENTHEAD MINES SEPTEMBER 1940**

NENTSBURY MINE. Mine closed.

I wrote H.M. Inspector of Taxes re: the general position and asked him specifically, if the Company, under the existing Law; relating to Income Tax, were able to claim the amount of losses agreed in previous years before becoming liable for Income Tax. A reply from the Inspector stated that as the Law stood, losses for the previous 5 Years would be allowed before the Company was liable for Income Tax.

In view of this fact, and no decision having been arrived at by the Non- Ferrous Metallic Ores Committee, I am trying to find a market for Mixed Concentrates, if a market can be found and a satisfactory price obtained my object is to work Nentsbury one shift, and break what remains of the good lead ore and the best of the Blende-Witherite ore.

RODDERUP FELL. During the month, 867 Tons of Ore was mined and crushed for a recovery of 88.15 Tons of Lead Concentrates, the recovery being 10.17%.

DEVELOPMENT. The Drive N., West of No.3 Shaft, has been driven through the Vein and for a distance of 20 feet. The floor of the Drive is 2 feet up the bottom of the Limestone, and is on the level of the main tram road, thus enabling the horses to go directly in the level and take the wagons directly to the Mill without either second handling by man-power or hoisting. Immediately the tram-road has been properly laid and transport made easy, we hope to drive the level at about 60 feet per month. No decision has been made by the Non-Ferrous Ores Committee.

MILL. In good condition.

Fluor Spar. None sold to date.

Sale of Gravel. We have sold 219.35 Tons during September.

GENERAL. The position generally at Nenthead is unchanged. We are meeting all costs from the revenue at Rodderup.

RODDERUP FELL MINE - SEPTEMBER 1940.

Development Footage:- **XXI.** 22 feet.

West Flats.

Development.

W. Watson & Partners.

22 days worked.

|        |   |      |      |       |      |      |     |               |       |
|--------|---|------|------|-------|------|------|-----|---------------|-------|
| L      | W | S.F. | S.M. | H     | C.F. | C.M. | )   | £             |       |
| 22 x 5 | - | 110  | -    | 10.82 | x 7  | -    | 770 | -             | 21.80 |
|        |   |      |      |       |      |      |     | ) Days Wages. |       |

Tonnage to Mill:- Nil.

Wages Paid:- £9. 19. 0.

Cost per Cu.M.:- 9/1½

Headings.

G. Hind & Partners.

381½ Days Worked.

|                  | L  | W    | S.F. | S.M. | H | C.F.  | C.M. | )            |                 |
|------------------|----|------|------|------|---|-------|------|--------------|-----------------|
| No. 3 Flat       | 18 | x 21 | -    | 378  | - | 35.12 | x 5  | -            | 1890 - 53.51    |
| " 4 "            | 15 | x 21 | -    | 315  | - | 29.26 | x 6  | -            | 1890 - 53.51    |
| " " "            | 15 | x 14 | -    | 210  | - | 19.51 | x 5  | -            | 1050 - 29.73    |
| " " "            | 18 | x 20 | -    | 360  | - | 33.44 | x 5  | -            | 1800 - 50.97    |
| " " "            | 20 | x 17 | -    | 340  | - | 31.59 | x 5  | -            | 1700 - 48.14    |
| " " "            | 16 | x 14 | -    | 224  | - | 20.81 | x 5  | -            | 1120 - 31.71    |
| " " "            | 18 | x 17 | -    | 306  | - | 28.43 | x 5  | -            | 1530 - 43.32    |
| " " Pillar       | 12 | x 15 | -    | 180  | - | 16.72 | x 5  | -            | 900 - 25.48     |
| " " "            | 9  | x 7  | -    | 63   | - | 5.85  | x 6  | -            | 378 - 10.70     |
| No. 5 Flat       | 15 | x 17 | -    | 255  | - | 23.69 | x 12 | -            | 3060 - 86.64    |
| " " Pillar       | 5  | x 10 | -    | 50   | - | 4.64  | x 7  | -            | 350 - 9.91      |
| " " Drift(Deads) | 20 | x 5  | -    | 100  | - | 9.29  | x 7  | -            | 700 - 19.82     |
|                  |    |      |      |      |   |       |      | )            |                 |
|                  |    |      |      |      |   |       |      | <u>16368</u> | <u>- 463.44</u> |

) Days Wages.

Tonnage to Mill:- 867

Wages Paid:- £183. 4. 1.

Cost per Cu.M.:- 7/11.

MINE STATISTICS.....September.....1940.

|                | Tons of Ore Mined. |      |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |       | Days Worked. |         |       |           |         |       | Tons per Miner's Day |       |        | Cubic Metres per Miner's Day |              |                | Wages paid per Miner's Day |        |       | Wages paid per Underground Man |       |          | Wages paid per Cubic Metre |          | No. of Drills Working | Dynamite |       |        |         |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------|--------------------|------|-------|------------------|---------|-------|----------------------|---------|-------|--------------|---------|-------|-----------|---------|-------|----------------------|-------|--------|------------------------------|--------------|----------------|----------------------------|--------|-------|--------------------------------|-------|----------|----------------------------|----------|-----------------------|----------|-------|--------|---------|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|                | Headings.          | Dev. | Total | In Ore           | In Dead | Total | In Ore               | In Dead | Total | Miners       |         |       | Labourers |         |       | In Ore               | Total | In Ore | Total                        | Bar-<br>rels | Wagon<br>gains | Total                      | In Ore | Total | In Ore                         | Total | Headings | Total                      | Headings |                       |          | Total |        |         |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                |                    |      |       |                  |         |       |                      |         |       | In Ore       | In Dead | Total | In Ore    | In Dead | Total |                      |       |        |                              |              |                |                            |        |       |                                |       |          |                            |          |                       |          |       | In Ore | In Dead | Total |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nents-<br>bury |                    |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                      |       |        |                              |              |                |                            |        |       |                                |       |          |                            |          |                       |          |       |        |         |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

COMPARATIVE STATEMENT.

Nentsbury ..... Tons in Dead .....  
 Rodderup ..... Tons in Dead .....

\* ..... Nentsbury ..... \* ..... Rodderup ..... \*

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 187          | 1311          | 187          | 1311          |
| February  | 120          | 1310          | 120          | 1310          |
| March     | 247          | 1011          | 247          | 1011          |
| April     | 320          | 810           | 320          | 810           |
| May       | 304          | 1010          | 304          | 1010          |
| June      | 370          | 1019          | 370          | 1019          |
| July      | 344          | 1015          | 344          | 1015          |
| August    | 350          | 1018          | 350          | 1018          |
| September | 485          | 1010          | 485          | 1010          |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |



# Report of Nenthead Mines October 1940

## REPORT OF NENTHEAD MINES

OCTOBER 1940.

|                     | <u>Nentsbury.</u> | <u>Rampgill.</u>         | <u>Rodderup.</u> | <u>Totals.</u> |
|---------------------|-------------------|--------------------------|------------------|----------------|
| Ore Mined           | Nil.              | Machinery maintained     | 884 Tons         | 884 Tons.      |
| Ore Milled          | Nil.              | in fair condition.       | 884 Tons         | 884 Tons.      |
| Lead Concs. prodcd. | Nil.              | Spare parts required     | 89.85 Tons.      | 89.85 Tons.    |
| % of Galena         | Nil.              | for Rodderup are removed | 10.16%           | 10.16%         |
| Hours worked        | Nil.              | as required.             | 169 hours        | 169 hours.     |
| Tons per hour       | Nil.              |                          | 5.23 Tons        | 5.23 Tons.     |

### S T O C K S .

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>    | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|---------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.                | 2500 Tons.       | 2500 Tons      |
| Blende-Witherite | 50 Tons.          | Nil.             | 150 Tons.           | Nil.             | 200 Tons.      |
|                  |                   |                  | (Blende approx 28%) |                  |                |

Rough Blende.....Nil.  
Fine Blende.....Nil.

Galena at Nentsbury, Nil.      Potters Ore at Nentsbury, Nil.  
" " Rodderup, 73.05 Tons.      " " Rodderup, 9.661 Tons.

Coal, consumed at Rampgill, 1.50 Tons.  
Fuel Oil, " " Nil.  
" " , " " Nentsbury, Nil.  
" " , " " Rodderup, 0.50 Tons.

COMPRESSED AIR produced at Nenthead, NIL.

COMPRESSED AIR produced at Rodderup from Water Power and Electricity  
750 cu.ft. per minute at a pressure of 85 lbs per square inch at the  
face.

## **NENTHEAD MINES OCTOBER 1940**

NENTSBURY MINE. Mine Closed.

Referring to the statement made in my report for September, I am trying to find a market for Mixed Concentrates. Samples have been sent to Mr. F. J. Ryland of Watford, Nr. London, who is trying to sell this material, used in the manufacture of rubber products. The concentrates produced in January 1939 contained about 70% BaCO<sub>3</sub> and 15% Zinc. This is about the same percentage of Barium and Zinc Sulphide in Lithopone which is about £18. to £19. per ton. If the concentrates produced containing about only 7 or 8% gangue, can be used where colour is not a consideration, it may be possible to sell the product at a remunerative price delivered Alston Station. A sample ground to pass 300 mesh produced a fine silky paste. I am repairing the Compressed Air Pipe Line, and if we are successful in selling the product, shall break ore in Nentsbury and hope to produce sufficient Compressed Air from water Power.

RODDERUP FELL. During the month 884 Tons of Ore were mined and crushed, for a recovery of 89.85 Tons of Concentrates, the recovery being 10.16%. The ore broken in the Flats after being pick is fairly consistent. Payable ore is found almost solely in the top of the Limestone and confined mainly to a height of 5 feet. The rock is very hard — consequently the cost of mining it is high.

DEVELOPMENT. The total distance driven in the drive or X-cut N. & W. of the west End Shaft is 61 feet. No payable ore has been found. At the end of November when we expect to have driven a total distance of 120 feet from the Vein, a Rise will be put up to the top of the Limestone. The present rate of driving is about 60 feet per month as expected.

MILL. In good condition.

SALE OF GRAVEL. Increasing. The quantity sold amounted to 399.15 Tons. Sales for November are likely to be much higher.

GENERAL. The position is unchanged. Sales of ore and gravel are meeting all costs and leaving a small profit.

1940.

[illegible]

COMPARATIVE STATEMENT.

|           |      |               |      |
|-----------|------|---------------|------|
| Nentsbury | .... | Tons in Deads | .... |
|-----------|------|---------------|------|

**Rodderup** .... 'Tons in Deads' ....

✠ Nentsbury ..... ✠ Rodderup ..... ✠

| Cubic Meters | Cost per C M | Cubic Meters | Cost    |
|--------------|--------------|--------------|---------|
| 100          | 1.00         | 100          | 100.00  |
| 200          | 1.00         | 200          | 200.00  |
| 300          | 1.00         | 300          | 300.00  |
| 400          | 1.00         | 400          | 400.00  |
| 500          | 1.00         | 500          | 500.00  |
| 600          | 1.00         | 600          | 600.00  |
| 700          | 1.00         | 700          | 700.00  |
| 800          | 1.00         | 800          | 800.00  |
| 900          | 1.00         | 900          | 900.00  |
| 1000         | 1.00         | 1000         | 1000.00 |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

|  |          |
|--|----------|
|  | Mos. Av. |
|  | Mos. Av. |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 187          | 13/11         |
| February  |              |               | 126          | 13/6          |
| March     |              |               | 197          | 11/11         |
| April     |              |               | 316          | 9/10          |
| May       |              |               | 504          | 10/6          |
| June      |              |               | 376          | 10/4          |
| July      |              |               | 394          | 10/5          |
| August    |              |               | 356          | 10/8          |
| September |              |               | 485          | 10/6          |
| October   |              |               | 494          | 10/11         |
| November  |              |               |              |               |
| December  |              |               |              |               |

# Report of Nenthead Mines November 1940

REPORT OF NENTHEAD  
MINES.

NOVEMBER 1940.

|                   | Nentsbury. | Rampgill.            | Rodderup. | Totals.    |
|-------------------|------------|----------------------|-----------|------------|
| Ore Mined         | Nil.       | Machinery maintained | 889 Tons  | 889 Tons.  |
| Ore Milled        | Nil.       | in fair condition.   | 889 "     | 889 "      |
| Lead Conc. prdcd. | Nil.       |                      | 88.35 "   | 88.35 "    |
| % of Galena       | Nil.       |                      | 10.16 %   | 10.16 %    |
| Hours Worked      | Nil.       |                      | 174 hours | 174 hours. |
| Tons per hour     | Nil.       |                      | 5.11 Tons | 5.11 Tons. |

## STOCKS

|                  | Nentsbury. | Rampgill. | Rodderup.          | Wellhope.  | Totals.    |
|------------------|------------|-----------|--------------------|------------|------------|
| Crude Ore        | Nil.       | Nil.      | Nil.               | 2500 Tons. | 2500 Tons. |
| Blende-Witherite | 50 Tons    | Nil.      | 150 Tons.          | Nil.       | 200 "      |
|                  |            |           | (Blende appr. 28%) |            |            |

Rough Blende: NIL.  
Fine Blende: NIL.

|                           |      |                          |            |
|---------------------------|------|--------------------------|------------|
| Galena at Nentsbury       | Nil. | Galena at Rodderup,      | 39.13 Tons |
| Potters Ore at Nentsbury, | Nil. | Potters Ore at Rodderup, | 28.00 "    |

|           |                       |           |
|-----------|-----------------------|-----------|
| Coal,     | consumed at Rampgill, | 4.0 Tons. |
| Fuel Oil, | " " " "               | 0.25 "    |
| Fuel Oil, | " " Nentsbury,        | Nil.      |
| Fuel Oil, | " " Rodderup,         | 0.50 "    |

COMPRESSED AIR produced at Nenthead, NIL.

COMPRESSED AIR produced at Rodderup from Water Power and Electricity  
750 cu. ft. per minute at a pressure of 85 lbs. per square inch at  
the face.

## **NENTHEAD MINES NOVEMBER 1940**

NENTSBURY MINE. Mine closed.

No decision has been reached re: the Mixed Concentrates. A sample of 1-cwt has been sent to be ground to 300 mesh.

The colour is the main objection for most users. The 6" pipe-line for conveying Compressed Air to Wellhope has been in a bad state for years.

I have therefore purchased some 6" pipes and repaired the line for 800 feet. Over 50 pairs of Clams were removed from the pipes taken from the line. This is the only means of getting Compressed Air by Water Power to Wellhope shaft to remove the platform erected to drive off in the Firestone, and which must be removed before any work can be done in the mine. Wellhope Shaft is the outlet from the mine if anything went wrong in the Nentsbury Main Level.

R0DDERUP FELL. During the month 889 Tons of ore was mined and crushed for a recovery of 88.35 Tons of Concentrates, the recovery being 10.16%, There is no change in mine conditions or values.

DEVELOPMENT. The footage driven was 63 ft. and the total distance from the Horse Level is 124 ft. At about 120 ft. we cut a fault containing Lead Ore. It seems as though the Fault cut is one of the main Faults in the Central Section where the ore improved on the N. side of the fault. Several wagons of payable ore were broken and sent to the Mill when we drove through the Fault. This can be regarded as encouraging. Development will be continued in this area, and should the same conditions prevail as in the Central area East of this point, a considerable area of payable ore is likely to be opened up.

MILL. In good condition.

SALE OF GRAVEL & STONES. During the month a total of 1802.1 Tons of Gravel and Stone was sold. We have also sold, for delivery in Dec.1940, Janry. and Febry. 1941, 3000 Tons of Stones at 1s/4½ per ton nett, and 200 Tons of Gravel at 3s/6d per ton nett.

GENERAL. Owing to loss of connection with. Head Office and to meet British regulations re: Balance Sheets and Income Tax, and to keep all accounts in good order, I have engaged Messrs. Greaves & Co., Accountants, of 1 St. Nicholas Buildings, Newcastle—on—Tyne, to prepare and audit our accounts.

## 1940.

November...

[illegible]

### COMPARATIVE STATEMENT.

|           |       |               |       |
|-----------|-------|---------------|-------|
| Nentsbury | ..... | Tons in Deads | ..... |
| Rodderup  | ..... | Tons in Deads | ..... |

✠..... Nentsbury ..... ✠..... Rodderup ..... ✠

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932

|  |          |
|--|----------|
|  | MoS. Av. |
|  | MoS. Av. |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 187          | 161.          |
| February  |              |               | 126          | 136           |
| March     |              |               | 297          | 1611.         |
| April     |              |               | 326          | 810           |
| May       |              |               | 304          | 106.          |
| June      |              |               | 376          | 104           |
| July      |              |               | 344          | 105.          |
| August    |              |               | 356          | 108.          |
| September |              |               | 485          | 106.          |
| October   |              |               | 494          | 101.          |
| November  |              |               | 492          | 108.          |
| December  |              |               |              |               |

## Report of Nenthead Mines December 1940

### REPORT OF NENTHEAD MINES.

DECEMBER 1940.

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u>                  | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------|-----------------------------------|------------------|----------------|
| Ore Mined         | Nil.              | Machinery kept in fair condition. | 955 Tons         | 955 Tons       |
| Ore Milled        | Nil.              |                                   | 955 "            | 955 "          |
| Lead Conc. prdcd. | Nil.              |                                   | 97.2 "           | 97.2 "         |
| % of Galena       | Nil.              |                                   | 10.17%           | 10.17%         |
| Hours Worked      | Nil.              |                                   | 190 Hours        | 190 Hours.     |
| Tons per hour     | Nil.              |                                   | 5.03             | 5.03           |

### S T O C K S.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>               | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|--------------------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.                           | 2500 Tons        | 2500 Tons.     |
| Blende-Witherite | 50 Tons.          | Nil.             | 150 Tons<br>(Blende appx. 28%) | Nil.             | 200 Tons.      |

Rough Blende:- NIL.  
Fine Blende:- NIL.

Galena at Nentsbury, NIL.      Potters Ore at Nentsbury, NIL.  
Galena at Rodderup, NIL.      Potters Ore at Rodderup, 15.495 Tons.

|           |                       |            |
|-----------|-----------------------|------------|
| Coal,     | consumed at Rampgill, | 1.50 Tons. |
| Fuel Oil, | " " "                 | 0.25 "     |
| " "       | " Nentsbury,          | Nil.       |
| " "       | " Rodderup,           | 0.50 " .   |

COMPRESSED AIR produced at Nenthead, NIL.

COMPRESSED AIR produced at Rodderup from Water Power and Electricity  
700 cu.ft. per minute at 85 lbs. per square inch.

NOTE: This report is from November 27th to December 31st.  
This alteration of date of closing is in accordance  
with British Law for Income Tax Regulations.



## **NENTHEAD MINES DECEMBER 1940**

NENTSBURY MINE. During the month, miners repaired the n level removed pipes and tram-rails in Dupont N. level where falls of roof and sides occurred, and repaired three more 12" pipes on the main pipe-line from Perry Dam to Brewery Shaft.

No decision has yet been reached re: Mixed Concentrates. After the worst of the wintry weather has passed, I contemplate, on the suggestion of the Non-Ferrous Metallic Ores Committee, to resume work on a small scale in Nentsbury on what is left of the Lead Ore reserves. It is possible we may cut some payable ore in branches of the veins now open, and in any case, working of a small scale, the mine should meet expenses.

RODDERUP FELL. During the month, which extended from Nov. 27th to Dec. 31st, 955 Tons of Ore was mined and crushed, and 97.2 Tons of concentrates produced. The recovery amounted to 10.17%. There is no appreciable change in the mine situation.

DEVELOPMENT. The footage driven forward during December was 29 feet, making a total distance driven from the Horse Level of 153 feet. A Cross-cut of 17 feet in length was also driven E. on the fault located 120 feet from the Horse Level.

MILL. In good condition.

Sale of Gravel & Stone. During the month 2365.7 Tons of Stone, being hand-picked stones from Rodderup Picking Table, and Gravel were sold at the rate per ton quoted in November report.

We have also sold to the Limmer & Trinidad Lake Asphalt Co. a further 2000 Tons of Gravel at 3/6d per ton on site from the middle of December. Practically all the Stones and Gravel in stock at Rodderup have been sold. The site will be cleared for further deposits.

GENERAL. At the end of the year the weather changed from comparatively mild wet weather to snow and frost. These conditions will make against production and it is possible the production for the beginning of 1941 will be lower.

RODDERUP FELL MINE.

DECEMBER 1940.

Development Footage:- 46 feet.

Development.

J. Armstrong & Partners.

58 Days Worked.

|            | L  | W   | S.F.  | S.M.    | H.  | G.F.        | C.M. )         |                 |
|------------|----|-----|-------|---------|-----|-------------|----------------|-----------------|
| Forebreast | 29 | x 5 | - 145 | - 13.47 | x 7 | - 1015      | - 28.74        | ) @ Days Wages. |
| Cross-cut  | 17 | x 5 | - 85  | - 7.90  | x 9 | - 765       | - 21.66        |                 |
| Side       | 7  | x 3 | - 21  | - 1.95  | x 9 | - 189       | - 5.95         |                 |
|            |    |     |       |         |     | <u>1969</u> | <u>- 55.75</u> |                 |

Tonnage to Mill:- Nil.

Wages Paid:- £27:11s: -d.

Cost per Cu.M.:- 9s/10½d.

West Flats.

J. Johnston & Partners.

414½ Days Worked.

|            | L  | W    | S.F.  | S.M.    | H.   | G.F.         | C.M. )          |                |
|------------|----|------|-------|---------|------|--------------|-----------------|----------------|
| No. 4 Flat | 18 | x 18 | - 180 | - 16.72 | x 6  | - 1030       | - 30.58         | ) @ Days Wages |
| " " "      | 16 | x 18 | - 288 | - 26.75 | x 6  | - 1728       | - 48.93         |                |
| " " "      | 10 | x 24 | - 240 | - 22.30 | x 5  | - 1200       | - 33.98         |                |
| " " "      | 16 | x 19 | - 304 | - 28.24 | x 6  | - 1824       | - 51.64         |                |
| No. 5 "    | 14 | x 17 | - 238 | - 22.11 | x 15 | - 3570       | - 101.08        |                |
| No. 5 "    | 16 | x 19 | - 304 | - 28.24 | x 8  | - 2432       | - 68.86         |                |
| " " Side.  | 13 | x 10 | - 130 | - 12.08 | x 6  | - 780        | - 22.09         |                |
| " " Side   | 19 | x 20 | - 380 | - 35.30 | x 6  | - 2280       | - 64.56         |                |
| " 3 Flt.   | 15 | x 20 | - 300 | - 27.37 | x 5  | - 1500       | - 42.47         |                |
| XXXXXXXX   |    |      |       |         |      | <u>16394</u> | <u>- 464.19</u> |                |

Tonnage to Mill:- 955 Tons.

Wages Paid:- £198:13s:10d.

Cost per Cu.M.:- 8s/6½d.

MINE STATISTICS.....December.....1940.

|             | Tons of Ore Mined. |      |       | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked. |          |       |      |     | Tons per Miner's Day |     | Cubic Metres per Miner's Day |        | Wages paid per Underground Man |      |              | Wages paid per Cubic Metre |      | No. of Drills Working |          | Dynamite |      |         |   |      |     |
|-------------|--------------------|------|-------|------------------|----------|-------|----------------------|----------|-------|--------------|----------|-------|------|-----|----------------------|-----|------------------------------|--------|--------------------------------|------|--------------|----------------------------|------|-----------------------|----------|----------|------|---------|---|------|-----|
|             | Headings.          | Dev. | Total | In Ore           | In Deads | Total | In Ore               | In Deads | Total | In Ore       | In Deads | Total | Bar- | In  | In                   | In  | Total                        | In Ore | Total                          | Tons | Cubic Metres | Headings                   | Dev. | Total                 | Headings | Total    | lb.  | per ton |   |      |     |
|             |                    |      |       |                  |          |       |                      |          |       |              |          |       |      |     |                      |     |                              |        |                                |      |              |                            |      |                       |          |          |      |         |   |      |     |
|             |                    |      |       |                  |          |       |                      |          |       |              |          |       |      |     |                      |     |                              |        |                                |      |              |                            |      |                       |          |          |      |         |   |      |     |
| Nentsbury   |                    |      |       |                  |          |       |                      |          |       |              |          |       |      |     |                      |     |                              |        |                                |      |              |                            |      |                       |          |          |      |         |   |      |     |
| ...Mos. Av. |                    |      |       |                  |          |       |                      |          |       |              |          |       |      |     |                      |     |                              |        |                                |      |              |                            |      |                       |          |          |      |         |   |      |     |
| ...Mos. Av. |                    |      |       |                  |          |       |                      |          |       |              |          |       |      |     |                      |     |                              |        |                                |      |              |                            |      |                       |          |          |      |         |   |      |     |
| Rodderup    | 955                | -    | 955   | 464              | 56       | 520   | 206                  | -        | 188   | 414          | 55       | 138   | -    | 610 | -                    | 230 | 202                          | 112    | 110                            | 156  | 085          | 917                        | 916  | 917                   | 912      | 1010     | 1019 | 510     | 7 | 1055 | 110 |
| 11 Mos. Av. | 696                | -    | 696   | 338              | 15       | 353   | 209                  | -        | 201   | 312          | 16       | 73    | -    | 401 | -                    | 221 | 211                          | 105    | 104                            | 173  | 086          | 915                        | 915  | 911                   | 811      | 1075     | 1016 | 515     | 5 | 784  | 105 |
| 12 Mos. Av. | 718                | -    | 718   | 344              | 15       | 362   | 209                  | -        | 199   | 321          | 19       | 78    | -    | 418 | -                    | 222 | 210                          | 105    | 104                            | 172  | 086          | 915                        | 911  | 913                   | 811      | 1075     | 1016 | 515     | 5 | 806  | 105 |

COMPARATIVE STATEMENT.

Nentsbury ..... Tons in Deads .....  
 Rodderup ..... Tons in Deads .....

..... Nentsbury ..... Rodderup .....

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 167          | 1311          |
| February  |              |               | 126          | 1316          |
| March     |              |               | 297          | 6111          |
| April     |              |               | 326          | 8110          |
| May       |              |               | 304          | 1016          |
| June      |              |               | 376          | 1014          |
| July      |              |               | 344          | 1015          |
| August    |              |               | 356          | 1018          |
| September |              |               | 485          | 1016          |
| October   |              |               | 494          | 1011          |
| November  |              |               | 442          | 1018          |
| December  |              |               | 520          | 1019          |

**ANNUAL REPORT  
Of the  
NENTHEAD MINES  
1940**

NENTSBURY MINE. During the year, Nentsbury Mine, except for the development carried out in Wellhope Shaft in the Firestone Stratum, was on a maintenance basis only.

Exploration drives were put out in the Firestone stratum from Wellhope Shaft to cut the "Cox" and "Dupont" Veins which yielded rich Lead Ore directly below. All calculations indicated that the Veins should be East of Wellhope shaft, but not knowing what occurred to the Veins in the different strata from the Great Limestone to the Firestone, drives were put out both East and West of the Shaft. The drive E. was driven 112 feet. The drive W. was driven 59 feet. No sign of a Vein was found in the Western drive. In the drive E. a Vein, or what might be the conjunction of "D" and "C" Veins, was cut 112 feet from the Shaft. A rise was put up on this Vein to a height of 33 feet on the inclination of the Vein. The throw of the strata was found to be greater than the thickness of the Firestone. Only traces, of mineral were found in the Vein, work was stopped during the week ending May 11th.

ORE RESERVES. The Ore Reserves at the end of the 1939, viz: 76633 Tons, of which Blende-Witherite-Lead Ore amounted to 73671 Tons and Lead Ore 2962 Tons.

GENERAL. During the year Dr. K.C.Dunham, on behalf of the Non-Ferrous Metallic Ores committee (appointed by the ministry of Supply) made an exhaustive report on Nentsbury, and later Mr Williams, a mining engineer employed by the Committee also Inspected the mine. A copy of Dr. Dunhams report is filed in the Nenthead Office. Consideration was given to working all the Mixed ore by Flotation, the Government to erect a plant for that purpose. No decision was made at the end of the year. It was also considered possible to produce and sell Mixed Concentrates to be ground for use in Rubber manufacture, and a sample of 1-cwt was sent to Messrs. Podmore & Co., Stoke-on-Trent, to be ground for experimental analysis. There was much delay in rail transport and the sample only arrived at the works in December. A report of the Gravel material has not yet come to hand.

In the meantime, the Air-pipe Lines have been repaired and some old ones replaced with new. The 12" pipe-line from Perry Dam to Brewery Shaft has also been repaired. The 2-cylinder Broom & Wade Compressor at Wellhope Shatt has been removed and brought down to Brewery Shaft and installed underground there where it can be operated by the Pelton Wheel. We should be able to produce sufficient Compressed Air from Water Power to operate Nentsbury Mine one shift and also do some development, If money is available.

RODDERUP FELL.

During 1940, 8614 Tons of Ore was mined and crushed.

The Lead Concentrates recovered amounted to 903.15 Tons, equal to a recovery of 10.48%. The stock of ore at Rodderup and Nentsbury amounted to 324.249 Tons. The production and stock therefore amounted to 1227.399 Tons. Sales during the year amounted to 1211.904 Tons. Stock in hand at the end of the year (December 31st 1940) was 15.495 Tons.

The ore was mined from the Flats in the Central area and on the North side of Rodderup Vein. The richest ore was found on the North side of a fault and in the top of the Tyne Bottom Limestone for about 6 feet in height. Working in a height of from 5 to 6 foot only, the cost per ton has increased both for labour and the cost of explosives. Wages have also increased by about 2X 20% owing to the rise in the cost of living as the result of war conditions, and the increase of Income Tax, which by Government decree is deducted by employers from the salaries and wages of Staff and employees and paid direct to the Collector of Taxes.

The cost of materials of all kinds, and explosives, has increased, varying from 5 to 50% on different items, and only limited quantities can be obtained. The Government issue permits specifying the quantities the Company can purchase and returns of purchases have to be sent to the appropriate Government departments.

DEVELOPMENT. Towards the end of 1940, a X-cut North West of No.3 Shaft was put out at the level of the main horse Level and in the bottom of the Tyne Bottom Limestone to prove if the ore continued in the North side of the main fault. The main fault was cut 120 feet from the Horse Level. The X-cut being in the bottom of the Limestone it was not to be expected that payable ore would be found at that random. The X-cut was continued a further 33 feet. A short drive of 17 feet was made on the fault East, and the roof of the drive taken out to prove if payable mineral existed. Several wagons of ore of from 5 to 6% Galena were recovered but the strata near the fault was so broken, that it was considered wise to continue driving the X-cut further North and then rise up to the top of the Limestone after the X-cut had been extended far enough to get out of the disturbed area. This work was in progress at the end of the year 1940.

ORE RESERVES. At the end of 1940, the ore reserves are approximately the same as at the end of 1939. A calculation prepared by Dr. Dunham states that he considers these are based on a conservative estimate, and that in all probability the ore reserves will exceed the figures given, viz: 100,000 Tons.

PRICE OF LEAD. The price of Lead has not been changed during the year and remains at £25. Per ton. The price paid us for Lead Concentrates of approximately 82% Pb and 3 ozs Silver, delivered to Messrs. Walkers Parker & Co., Ltd., Elswick Lead Works, Newcastle-on-Tyne, is about £16 per ton nett, equals 320/-, and Potters Ore sold elsewhere in this country realises a nett price of approximately £19\* per ton, equals 380/-.

SALES OF STONE & GRAVEL. The quantity of Stones and gravel sold during the year, mainly from September to December 31st, amounted in all to 5945.4 Tons. The total nett revenue amounted to £802. 11s.9d.

The Stones were sold at the price of 1s/6d per ton on site, less 1½d. per ton commission, equals 1s/4½d per ton to the Company.

The Gravel was sold at 3s/6d to 4s/6d per ton at the mine according to the grade.

Regarding Gravel and Stones, we have sold all the remaining heap of hand-picked stones, for delivery in 1941, which amounts to, date to about 1500 Tons of Stone and 2500 Tons of Gravel at the prices recorded above.

GENERAL. Since Germany invaded Belgium and France capitulated, all correspondence with the Head Office and any member of the Company outside the British Isles has been impossible and has been prohibited by Government decree. The last communication received, was from the General Manager dated June 18th 1940, and contained copy of telegram sent to me on June 16th, and which was received on July 7th, and copy of a telegram sent to Dr. Rose (Secretary to the Non-Ferrous Metallic Ores Committee) on the same date. These were delivered August 6th 1940.

Correspondence with Sir Christopher Bullock, the Non-ferrous Metallic Ores Committee, and all Government officials will be found in my files. The Company's business was carried on as usual and the output from Rodderup was increased to the quantity given the General Manager in my letters & slightly exceeded. The concentrates in bulk were sold to Messrs Walker Parker & Co., Ltd., Newcastle upon Tyne. The Potters Ore to Messrs. Morris Ashby Ltd., London & Liverpool, and the British Pyros White Lead Co., Ltd., Yiewsley, Middlesex. Payment for all ore sold was paid for before December 31<sup>st</sup>.

In view of the difficult situation and not being able to communicate with Head Office, I considered it right to protect the Company's interests to engage a firm of Accountants to prepare the Balance Sheet for 1940 and also to assist me to come to some understanding with H. M. Inspector of Taxes re: the Company's capital etc. and our position re: Excess Profits Tax. This matter was under consideration at the end of 1940 and was not settled.

I also effected a policy of Insurance with the National Employers Mutual General Insurance Association Ltd. and insured all employees for accident in conformity with the Employers Liability Act.

On December 31st, without any warning Martins Bank Ltd Alston, informed me that on Instructions from the Trading with the enemy Branch of the Board of Trade, they had frozen the Company's credit account as from that date. Fortunately we had kept about £900, in cash in the safe at Nenthead, and were thus able to pay wages etc. pending a settlement. I immediately consulted Messrs. Blackburn & Main, Solicitors, Carlisle, and also communicated with Mr. Hallett, and by phone with Dr. Dunham, who was leaving for London on January 6th, and with Dr. Rose, the Secretary of the Non-Ferrous Ores Committee. I also wrote a strong letter to the Bank. These Influential people in London, immediately got in touch with the Enemy Branch of the Board of Trade, who have granted a licence in my name to carry on the Company's business in the

United kingdom (but not elsewhere) and to use the Company's credit for so doing. We passed through an anxious period for a fortnight. I consider an indignity was inflicted on the Company by the Bank and the Authority concerned which could easily have been avoided by giving us notice not to issue cheques for a fortnight, say, until the matter was settled. There was about £8000 to the Company's credit in the Bank at the time and our total liabilities did not amount to more than £1500. Outstanding debts owing to the Company amounted to upwards of that amount. All correspondence will be found in my files.

I wish to place on record my deep appreciation of all the firms with whom we do business for their kindness and consideration in what was so critical a time, and particularly do I wish to record the extreme kindness, courtesy, and valuable assistance immediately given us by Messrs. Morris Ashby Limited, London. Their kindness was beyond all praise, as also was the kindness of many other firms.

I trust I shall be able to carry on the Company's mining business here with a small profit until the time comes for Head Office to resume control.

The result of the years working should show a small profit after all accounts of every kind have been paid, including Nentsbury rent etc. etc. In the main the Company's property is intact and in fair condition.

Outlook for 1941. The outlook for 1941 will depend upon circumstances over which I have little control. I do not however consider the prospect discouraging, if we are allowed to carry on as at present. We shall, however, have to consider working Nentsbury on a small scale, and as we have been able to pay all the standing Charges on Nentsbury from revenue from Rodderup, I consider Nentsbury can be worked on a small scale to meet costs of working and possibly pay for its share of Standing charges. Pressure will be brought to bear upon us to work Nentsbury, or the mine and plant may be confiscated without any payment until the end of the war. I consider if it can be kept, it will be in the Company's interest to control and work the mine.

I wish to record the valuable help and assistance rendered me by all members of the company's staff, and to assure those into whose hands this report may fall, that I will do my utmost to protect the Company's interests, will not, if it is possible to avoid it, lose the Company's money, and will maintain the Company's position and prestige to the best of my strength and ability.



**SUPPLEMENTARY REPORT**  
**To the**  
**ANNUAL REPORT for 1940**

Since the Annual Report for 1940 was typed, the Accountants have completed the Balance Sheet for that year. The nett profit for the year amounted to £4855. 4s. 10d.

There was only 8614 Tons of Ore from Rodderup, mined and milled. The value per ton of the Ore mined & milled was 42.96 Shillings. The cost per ton, including the cost of maintaining Nentsbury, the development in Wellhope Shaft, and all costs of every description, amounted to 31.69 Shillings per ton. The profit was 11.27 Shilling per ton of ore mined and milled.

I anticipate, if the present labour force is not depleted, that the results for 1941, provided the mine ore does not drop in value, will be substantially the same.

## Report of the Nenthead Mines January 1941

### REPORT OF NENTHEAD MINES.

JANUARY 1941.

|                    | <u>Nentsbury.</u> | <u>Rampgill.</u>          | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------|-------------------|---------------------------|------------------|----------------|
| Ore Mined          | Nil.              | Some of the belts & parts | 760 Tons.        | 760 Tons.      |
| Ore Milled         | Nil.              | have been taken for       | 760 "            | 760 "          |
| Lead Concs. prdcd. | Nil.              | spares at Rodderup.       | 75.65 "          | 75.65 "        |
| % of Galena        | Nil.              |                           | 9.95%            | 9.95%          |
| Hours worked       | Nil.              |                           | 148 hrs.         | 148 hrs.       |
| Tons per hour      | Nil.              |                           | 5.13             | 5.13           |

### S T O C K S.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>             | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.                         | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | 50 Tons           | Nil.             | 150 Tons<br>(Blende app.28%) | Nil.             | 200 Tons       |

Rough Blende:- Nil.  
Fine Blende:- Nil.

Galena at Nentsbury, Nil.      Potters Ore at Nentsbury, Nil.  
" " Rodderup, 52.86 Tons.      " " " Rodderup, Nil.

|           |                       |            |
|-----------|-----------------------|------------|
| Coal,     | consumed at Rampgill, | 1.50 Tons. |
| Fuel Oil, | " " Rampgill,         | 0.25 "     |
| " "       | " " Nentsbury,        | Nil. "     |
| " "       | " " Rodderup,         | 0.50 "     |

COMPRESSED AIR produced at Nenthead, NIL.

COMPRESSED AIR produced at Rodderup from Water Power and Electricity  
750 cu.ft. per minute at 85 lbs. pressure per square inch.

Note:      The month's reports are now made up to the end  
of the month. This Report ends on Jan. 31st 1941.

## **NENTHEAD MINES JANUARY 1941**

NENTSBURY MINE. During the month the miners, two in number, have removed pipes and tram-rails from parts of the mine in Nentsbury which are worked out, and where the rails and pipes were likely to be buried by falls of roofs and sides of levels. They have also repaired fallen arches and hoppers, and have replaced damaged air-pipes outside the mine. Also they have helped to remove poles carrying electric cable and telephone wires from Rampgill to Wellhope Shaft, broken by the wind and snow. Correspondence with the Non-Ferrous Ores Committee continues re: working Nentsbury for Zinc which the Government requires. The Committee have suggested a loan to put up a Flotation Plant. I have suggested the Government should put up the plant, and re-coup the cost from any profit made after the expenses of working are met.

RODDERUP FELL. During the month which was interrupted by heavy snowstorms and frost, 760 Tons of Ore were mined and crushed, and 75.65 Tons of Galena Concentrates recovered. The recovery amounted to 9.95%. The mine situation shows little change.

DEVELOPMENT. Owing to the severe weather which prevented many of the miners getting to work, only a small amount of Development was possible. All the miners who could attend were employed mining ore.

MILL. In good Condition.

SALE OF GRAVEL. This work was also interrupted by bad weather. The roads were blocked with snow for about two weeks. The quantity sold amounted to 1305.5 Tons and was composed of Stones at 1s/4½d per ton nett, and gravel at 3s/6d per ton nett.

GENERAL. On the 31st December, and without any warning, the Trading with the Enemy Branch of the Board of Trade, informed Martins Bank Limited, that the Company's account was frozen as and from that date. Cheques in payment of accounts, posted the previous day, were returned marked "Payment stopped". I considered this to be an uncalled for indignity to the Company's prestige and my own. I was unfortunately in a difficult position. First, I could not cease producing ore because of the national situation, and second, I was personally responsible for the payment of wages to the workmen. The situation was therefore a most complex one. I immediately consulted Messrs. Blackburn & Main, Solicitors, Carlisle, after an interview with the Manager of Martins Bank, Alston. The position at the time was the Company had about £8000 in the Bank to its credit and liabilities amounted to not more than £1500, while there was upwards of £2000 owing to the Company from good customers. In addition, and as a precautionary measure, we had about £900. in cash in the safe at Nenthead House. Work was consequently not interrupted, but the Company's prestige was somewhat hurt by having to explain to firms the reason why cheques were marked "payment stopped". Messrs. Blackburn & Main considered I should go to London and ask for an interview with the Board of Trade. After consideration I came to the conclusion that it might be difficult to

obtain an interview with the President of the Board of Trade. Up to Dec. 28th, Dr. Dunham, on behalf of the Non-Ferrous Ores Committee, was urging us to increase our output and we were considering re-opening Nentsbury. Taking everything into consideration I decided to solicit the help of the Non-Ferrous Ores Committee and, through Dr. Dunham, I got into communication with them, and also with Mr. Hallett. I also asked Martins Bank Ltd., to support the application. I applied for a licence to carry on the Company's business. This licence was granted to me on January 9th, and the Enemy Branch of the Board of Trade wired Martins Bank to release our credit. I must place on record that I consider the Company's case might have been more carefully explained and more fully, by Martina Bank Ltd., who knowing that the Company had been customers of the Bank for 44 years, were in a sound position financially, and that the prestige of the Company was excellent, should have placed all the facts before the Board of Trade and not allowed the Company to be placed in such an undignified position.

I am compelled to give the Controller of the Enemy Branch of B.O.T., full particulars of all we do, and supply him with a copy of the 1940 Balance Sheet, when it is prepared by Messrs, Greaves & Co., Accountants, Newcastle. The general position of the Company is sound at present and I do not anticipate any further difficulty. I would like to place on record my appreciation of Mr. Hallett's help, the Non-Ferrous Ores Committee's and Dr. Dunham's, and also the help and kindness of several firms with whom we do business, with special mention of Messrs. Morris Ashby Ltd. Full details and all correspondence will be found in the Company's files.

RODDERUP MINE - JANUARY 1941.

Development Footage Nil.

---

Development.

J. Armstrong & Partner.

29 $\frac{3}{4}$  Days.

Rise      L    W    SF.   S.M.   H.   C.F.   C.M.  
8 x 6 - 48 - 4.46 x 11 - 528 - 14.95 @ Days Wages.

Tonnage to Mill:- Nil.

Wages Paid:- £14:17s: 6d.

Cost per Cu.M.:- 19s/10d.

---

Headings.

West Flats.

J. Johnston & Partners.

344 $\frac{3}{4}$  Days.

|          | L       | W | S.F. | S.M. | H.         | C.F. | C.M. )                    |
|----------|---------|---|------|------|------------|------|---------------------------|
| Flat     | 26 x 21 | - | 546  | -    | 50.72 x 6  | -    | 3276 - 92.76)             |
| "        | 14 x 22 | - | 308  | -    | 28.61 x 6  | -    | 1848 - 52.33)             |
| "        | 19 x 19 | - | 361  | -    | 33.54 x 6  | -    | 2166 - 61.33)             |
| " Pillar | 5 x 9   | - | 45   | -    | 4.18 x 6   | -    | 270 - 7.64) @ Days Wages. |
| "        | 10 x 18 | - | 180  | -    | 16.72 x 15 | -    | 2700 - 76.45)             |
| "        | 14 x 9  | - | 126  | -    | 11.76 x 8  | -    | 1008 - 28.54)             |
| " Roof   | 7 x 5   | - | 35   | -    | 3.25 x 4   | -    | 140 - 3.96)               |
| "        | 18 x 20 | - | 360  | -    | 33.44 x 6  | -    | 2160 - 61.16)             |
| "        | 14 x 20 | - | 280  | -    | 26.01 x 6  | -    | 1680 - 47.56)             |

15248 - 431.73

Tonnage to Mill:- 760.

Wages Paid:- £174: 8s: -d.

Cost per Cu.M.:- 8s/1d.

---

# MINE STATISTICS

January 1941.

|  | Tons of Ore Mined. |  | Cubic Metres Cut |  |          |  | Tons per Cubic Metre |  |        |  | Days Worked. |  |       |  |        |  | Tons per Miner's Day |  |       |  | Cubic Metres per Miner's Day |  |          |  | Per Underground Man |  |        |  | Wages paid per Miner's Day |  |       |  | Wages paid per Underground Man |  |          |  | Wages paid per Cubic Metre |  | No. of Drills Working |  | Dynamite |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |       |  |        |  |          |  |
|--|--------------------|--|------------------|--|----------|--|----------------------|--|--------|--|--------------|--|-------|--|--------|--|----------------------|--|-------|--|------------------------------|--|----------|--|---------------------|--|--------|--|----------------------------|--|-------|--|--------------------------------|--|----------|--|----------------------------|--|-----------------------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|-------|--|--------|--|----------|--|
|  |                    |  | In Ore           |  | In Deads |  | Total                |  | In Ore |  | In Deads     |  | Total |  | In Ore |  | In Deads             |  | Total |  | In Ore                       |  | In Deads |  | Total               |  | In Ore |  | In Deads                   |  | Total |  | In Ore                         |  | In Deads |  | Total                      |  | In Ore                |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  | Total |  | In Ore |  | In Deads |  |

## COMPARATIVE STATEMENT.

✱ Nentsbury ✱ Rodderup ✱

Nentsbury Tons in Deads  
Rodderup Tons in Deads

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 447          | 101-          |              |               |
| February  |              |               |              |               |
| March     |              |               |              |               |
| April     |              |               |              |               |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

## Report of Nenthead Mines February 1941

### REPORT OF NENTHEAD MINES.

FEBRUARY 1941.

|                    | <u>Nentsbury.</u> | <u>Rampgill.</u>             | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------|-------------------|------------------------------|------------------|----------------|
| Ore Mined          | Nil.              | Spare parts of machinery     | 550 Tons.        | 550 Tons.      |
| Ore Milled         | Nil.              | and parts of machines        | 550 "            | 550 "          |
| Lead Concs. prdcd. | Nil.              | required for Rodderup        | 55.60 "          | 55.60 "        |
| % of Galena        | Nil.              | have been taken to Rod       | 10.1%            | 10.1%          |
| Hours worked       | Nil.              | derup. Engines etc. maintain | 107 hrs.         | 107 hrs.       |
| Tons per hour      | Nil.              | ed in working condition.     | 5.17 Tons        | 5.17 Tons.     |

### S T O C K S.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.             | 2500 Tons.       | 2500 Tons.     |
| Blende Witherite | 50 Tons           | Nil.             | 150 Tons         | Nil.             | 200 Tons.      |
|                  |                   |                  | (Zinc appr. 28%) |                  |                |

Rough Blende...NIL.  
Fine Blende....NIL.

Galena at Nentsbury, Nil.      Potters Ore at Nentsbury, Nil.  
" " Rodderup, 92.31 Tons.      " " Rodderup, 27.445 Tons.

COAL consumed at Rampgill 1.00 Tons  
FUEL OIL " " Nil.  
" " " " Nentsbury Nil.  
" " " " Rodderup Nil.

COMPRESSED AIR produced at Nenthead amounted to small quantities produced by Water Power to provide power for hoisting at Wellhope Shaft when the platform, pipes, and rails etc. were removed.

COMPRESSED AIR produced at Rodderup from Water Power and Electricity about 500 cu.ft. per minute on average at 85 lbs. pressure.

NOTE: The month's working was seriously affected by heavy snow storms, and, for part of the month, a few miners only could get to the mine and these only intermittently.



## **NENTHEAD MINES FEBRUARY 1941**

NENTSBURY MINE. During the month, H. Peart, mine Foreman, and two miners have maintained the mine levels, removed tram-rails for use in Rodderup, and repaired the air-pipe line to enable us to remove the platform etc. in Wellhope Shaft, preparatory to any work which may be done in Nentsbury after the winter is over. Unless the platform was removed, there could be no efficient ventilation in the mine.

RODDERUP FELL. The heavy snowstorms experienced in January, continued with increased force during February. All roads were completely blocked, and both telephone and telegraph communications were cut off for upwards of two weeks. Miners living at a distance could not get to the mines, and consequently the output was considerably less than normal. Not for many years has there been such a heavy fall of snow, not continued for such a long time.

550 Tons of Ore were mined and crushed, from which 55.60 Tons of Lead Ore concentrates were recovered, a percentage of 10.10%.

DEVELOPMENT. No. development was carried out, all miners who could reach the mine, being employed to break ore.

MILL. In good working condition.

SALE OF GRAVEL. The purchaser of the Stones managed to get additional lorries, and this enabled us to sell 2328.5 Tons of Stones and Gravel when the roads were opened. The Stones and Gravel were sold at nett prices at Rodderup and were transported to the Aerodromes at Carlisle and Longtown. The prices were the same as quoted in January report.

GENERAL. On the 25th of February I received a telegram from Mr. B. T. Hallett, London, despatched on the 21st but owing to the general break-down of telegraph and telephone services, the telegram which came as far as Haltwhistle on the 24th Febry., was sent up by mail on the 25th and delivered at 3.30 p.m. The purport of the telegram was for me to meet Mr. Hallett in Newcastle on the date I received the telegram. This being impossible I sent a clerk to Haltwhistle to try to get a personal call to Mr. Hallett and arrange a meeting at a later date.

A meeting was arranged for the 4th of March, and on that date I met Mr. Hallett in Newcastle.

The business to be discussed was the withdrawal of either Mr. Hallett or myself from holding a license from the Enemy Branch of the Board of Trade to trade in the Vieille Montagne Zinc Co.'s name in this country. When communications with Head Office were cut in June 1940, Mr. Hallett applied for a license to trade in the Co.'s name and use the Co.'s funds in this country for that purpose. Eventually a licence was granted him.

In June 1940, I was called to London to give evidence before the Non-Ferrous Metallic Ores Committee and the question of trading was raised at that meeting.

The Committee told me that there was no need for me to be anxious. If necessary they (the Committee) would requisition the mines and plant, but if I was prepared to carry on I could do so. I also spoke to the Bank Manager, and was told he had reported to his Head Office that the V.M. was a foreign company but that business was conducted as formerly. I was requested too reply in writing to various questions, and I did so, after consulting Messrs. Blackburn & Main, Solicitors. Nothing happened until 31st December. I reported fully in my last report, on this matter. I was granted a licence to trade and carry on as usual respecting the mines, and continued doing so.

Mr. Hallett stated he had been requested to see the Official of the Enemy Branch of the B.O.T., who told him that the Government could not grant two licences and either he or I would have to withdraw, from holding a licence, but that in any case the mines would have to continue to be worked in the interests of the country.

After a friendly discussion, I agreed in principle to withdrawing in Mr. Hallett's favour, conditionally that the a/c at Martins Bank, Alston, should be specified in the licence to be used for working the mines in Alston Moor, and that, as contained in the licence granted me, it would be used for that purpose, and for which I was held responsible in the licence granted me in January.

Eventually a copy of the licence granted to Mr Hallett on March 7th, was sent me. This document is in the safe. Para.2 reads as follows: "The Nenthead Branch of the Company, including the Lead and Zinc Mines at Alston shall continue to be carried on under the management of Mr. A. Treloar, and the Company's bank account at Martins Bank Ltd., Alston, shall be used for that purpose, it being understood that Mr. Treloar's Signature is acceptable to the Bank.

Mr Hallett pointed out that by this arrangement he would be able to hold his connection in London and the country generally, and that it would be in the Company's interest. Of course, the Board of Trade could grant or withhold a licence to either or both of us, but from other sources I was given to understand that the mines would have to be kept working, and this was supported by Mr Hallett's statement. After consideration I did what I thought was best in the Company's interest.

RODDERUP MINE - FEBRUARY 1941.

Development footage:- Nil.

Development. J. Armstrong & Partner. 22 8 days worked.

L W S.F. S.M. H. C.F. C.M.  
Rise 8 x 6 - 48 - 4.46 x 5 - 240 - 566 @ Days Wages.

Tonnage to Mill:- Nil.

Wages Paid: £4. 0. 0.

Cost per C.M.:- 14s/2d.

Headings.

West Flats.

J. Johnston & Partners.

249 1/4 Days worked.

|               | L  | W    | S.F.  | S.M.    | H.   | C.F.   | C.M.    | )        |
|---------------|----|------|-------|---------|------|--------|---------|----------|
| Flat No.4     | 12 | x 24 | - 288 | - 26.75 | x 6  | - 1728 | - 48.93 | )        |
| " " " Pillar. | 11 | x 9  | - 99  | - 9.20  | x 6  | - 594  | - 16.82 | )        |
| " " "         | 10 | x 15 | - 150 | - 13.93 | x 6  | - 900  | - 25.48 | ) @ Days |
| " " "         | 16 | x 19 | - 304 | - 28.24 | x 6  | - 1824 | - 51.65 | ) Wages  |
| " " "         | 10 | x 11 | - 110 | - 10.22 | x 5  | - 550  | - 15.57 | )        |
| " No.5        | 5  | x 18 | - 90  | - 8.36  | x 15 | - 1350 | - 38.22 | )        |
| " " "         | 8  | x 12 | - 96  | - 8.92  | x 9  | - 364  | - 24.66 | )        |
|               |    |      |       |         |      | 7810   | -221.13 | )        |

Tonnage to Mill:- 550.

Wages Paid:- £128: 2: 6.

Cost per C.M.:- 11s/7d.

# MINE STATISTICS

February 1941.

|             | Tons of Ore Mined. |      |       | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked. |          |       |           |          | Tons per Miner's Day |       |        | Cubic Metres per Miner's Day |        |       | Per Underground Man |              |          | Wages paid per Miner's Day |       |          | Wages paid per Underground Man |          |       | Wages paid per Cubic Metre |         |        | No. of Drills Working |       | Dynamite |          |
|-------------|--------------------|------|-------|------------------|----------|-------|----------------------|----------|-------|--------------|----------|-------|-----------|----------|----------------------|-------|--------|------------------------------|--------|-------|---------------------|--------------|----------|----------------------------|-------|----------|--------------------------------|----------|-------|----------------------------|---------|--------|-----------------------|-------|----------|----------|
|             | Headings.          | Dev. | Total | In Ore           | In Deads | Total | In Ore               | In Deads | Total | Miners       |          |       | Labourers |          |                      | Total | In Ore | Total                        | In Ore | Total | Tons                | Cubic Metres | Headings | Dev.                       | Total | Headings | Total                          | Headings | Total | lbs.                       | per ton |        |                       |       |          |          |
|             |                    |      |       |                  |          |       |                      |          |       | In Ore       | In Deads | Total | In Ore    | In Deads | Total                |       |        |                              |        |       |                     |              |          |                            |       |          |                                |          |       |                            |         | In Ore | In Deads              | Total | In Ore   | In Deads |
| Nentsbury   |                    |      |       |                  |          |       |                      |          |       |              |          |       |           |          |                      |       |        |                              |        |       |                     |              |          |                            |       |          |                                |          |       |                            |         |        |                       |       |          |          |
| ...Mos. Av. |                    |      |       |                  |          |       |                      |          |       |              |          |       |           |          |                      |       |        |                              |        |       |                     |              |          |                            |       |          |                                |          |       |                            |         |        |                       |       |          |          |
| ...Mos. Av. |                    |      |       |                  |          |       |                      |          |       |              |          |       |           |          |                      |       |        |                              |        |       |                     |              |          |                            |       |          |                                |          |       |                            |         |        |                       |       |          |          |
| Rodderup    | 550                | -    | 550   | 221              | 10       | 227   | 249                  | -        | 242   | 249          | 5        | 44    | -         | 301      | -                    | 301   | 2.21   | 2.14                         | 0.89   | 0.88  | 1.85                | 0.75         | 103      | 103                        | 103   | 911      | 1313                           | 515      | 5     | 452                        | 0.82    |        |                       |       |          |          |
| 1 Mos. Av.  | 700                | -    | 700   | 432              | 15       | 447   | 176                  | -        | 176   | 445          | 29       | 83    | -         | 457      | -                    | 457   | 2.20   | 2.03                         | 1.25   | 1.19  | 1.10                | 0.98         | 101      | 101                        | 101   | 919      | 918                            | 510      | 7     | 728                        | 0.90    |        |                       |       |          |          |
| 2 Mos. Av.  | 655                | -    | 655   | 327              | 10       | 337   | 200                  | -        | 194   | 297          | 18       | 64    | -         | 379      | -                    | 379   | 2.20   | 2.08                         | 1.10   | 1.07  | 1.73                | 0.88         | 102      | 102                        | 102   | 910      | 1115                           | 571      | 6     | 590                        | 0.90    |        |                       |       |          |          |

## COMPARATIVE STATEMENT.

Nentsbury Nentsbury Rodderup

Nentsbury Tons in Deads

Rodderup Tons in Deads

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 447          | 10/-          |
| February  |              |               | 227          | 13/3          |
| March     |              |               |              |               |
| April     |              |               |              |               |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

...Mos. Av.  
...Mos. Av.

## Report of Nenthead Mines March 1941

### REPORT OF NENTHEAD MINES.

MARCH 1941.

|                    | <u>Nentsbury.</u> | <u>Rampgill.</u>       | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------|-------------------|------------------------|------------------|----------------|
| Ore Mined          | Nil.              | Plant maintained       | 700 Tons         | 700 Tons.      |
| Ore Milled         | Nil.              | in as good a condition | 700 "            | 700 "          |
| Lead Concs. prdcd. | Nil.              | as possible.           | 71.6 "           | 71.6 "         |
| % of Galena        | Nil.              |                        | 10.23%           | 10.23%         |
| Hours worked       | Nil.              |                        | 138 hrs.         | 138 hrs.       |
| Tons per hour      | Nil.              |                        | 5.07 Tons        | 5.07 Tons.     |

### S T O C K S.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>              | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|-------------------------------|------------------|----------------|
| Crude Ore        | Nil               | Nil.             | Nil.                          | 2500 Tons        | 2500 Tons.     |
| Blende-Witherite | 50 Tons           | Nil.             | 150 Tons<br>(approx. 28% Zn.) | Nil.             | 200 "          |

Rough Blende...Nil.  
Fine Blende....Nil.

Galena at Nentsbury, Nil.                      Potters Ore at Nentsbury, Nil.  
Galena at Rodderup, 22.138,701 Tons, Potters Ore at Rodderup, 17.395 Tons.

|          |                       |           |
|----------|-----------------------|-----------|
| COAL     | consumed at Rampgill, | 1.5 Tons. |
| FUEL OIL | " " " "               | Nil.      |
| " "      | " " Nentsbury,        | Nil.      |
| " "      | " " Rodderup,         | Nil.      |

COMPRESSED AIR produced at Nenthead. A small quantity was produced intermittently to supply power for testing the air-pipe line above and below ground, and to supply sufficient power to lift rails, pipes, etc.

COMPRESSED AIR produced at Rodderup from Water Power and Electricity about 500 cu.ft. per minute at 85-lbs. pressure. Compressed Air was used for pumping and power for Compressed Air Drills.

NOTE: Almost to the end of March, the output was affected by heavy snow storms which continued without cessation for the first three weeks of the month. Roads were completely blocked, and many miners living at a distance were unable to travel to work.

## **NENTHEAD MINES**

### **MARCH 1941**

NENTSBURY MINE. During the early part of March the severe snowstorm continued. Damage was done to the poles carrying the cable and wires from Rampgill to Wellhope, and some damage was done to the mine buildings. The miners were employed part of the time doing necessary repairs when the weather conditions permitted them to work, with difficulty, outdoors. They were employed underground repairing fallen arches in the main level, when unable to work outdoors.

The Government desire us to work the Lead Ore in Nentsbury, and arrangements will be made during April to get Nentsbury Mill in condition. It is also probable the Government may consider requesting us to work the Zinc Ore, and, possibly, Barytes and Witherite. The prices for the finished products should allow us to work without loss.

RODDERUP FELL. Conditions at Rodderup underground are unchanged. The output was affected by the snow storm, but directly the weather improves, the output, with the present labour force, should be about 80 tons per month. If more labour can be obtained, we hope to increase the output to 100 Tons per month, but this depend entirely on the labour available. During the month 700 Tons were mined and crushed, and 71.6 Tons of Galena Concentrates produced, a percentage of 10.23%.

DEVELOPMENT. No development was done, all available miners being employed producing ore.

MILL. In good condition.

SALE OF GRAVEL and Stones. The sale of Stones and Gravel amounted to 2480.4 Tons. Of this, by far the greatest quantity was stones, the nett price of which on site was 1s/4½d per ton, and gravel 3s/6d per ton on site. During April, all the available Stones will be sold. We have sold over 8000 Tons of Stones and cleared all hand-picked stones both at Rodderup and Nentsbury. There is upwards of 2000 more tons of gravel in stock.

GENERAL. On the 8th of April, I received a cable from the V.M. Co. from Viviez, but owing to conditions contained in the license from the Board of Trade, which, prohibited any communication whatsoever to any member in enemy-occupied territory, I was unable to reply. I therefore got in touch with Mr. Hallett in London, by phone, and sent the cable to him to take to the Board of Trade and arrange with that authority, if possible, to send a reply. Up to date I have not heard from Mr Hallett. Any attempt to reply without consulting the Board of Trade, would probably result in the cancelling of the licence by the Board of Trade, and we would be unable to trade, while the Government would take over the Company's mines and plant. The result of the working of the mines so far, and the sale of Lead Ore to Messrs. Walker Parker and Potters Ore to Messrs. Morris Ashby Ltd., together with the sale of Stone and Chippings, has enabled us to work at a small profit in spite of increases in Labour costs and Materials.

RODDERUP FELL MINE.

Development Footage:- Nil.

West Flats.

J. Johnston & Partners.

365½ Days Worked.

|                   | L  | W    | S.F.  | S.M.   | H    | C.F.         | C.M.            |          |
|-------------------|----|------|-------|--------|------|--------------|-----------------|----------|
| No.5 Bottom Flat. | 11 | x 18 | - 198 | -18.39 | x 15 | - 2970       | - 84.09         | )        |
| " 4 Top "         | 15 | x 18 | - 270 | -25.08 | x 6  | - 1620       | - 45.87         | )        |
| " " " "           | 16 | x 16 | - 256 | -23.78 | x 6  | - 1536       | - 43.49         | )        |
| " " Pillar        | 6  | x 7  | - 42  | - 3.90 | x 6  | - 252        | - 7.14          | ) @ Days |
| " " " "           | 7  | x 7  | - 49  | - 4.55 | x 6  | - 294        | - 8.32          | ) Wages. |
| " " Flat          | 16 | x 24 | - 384 | -35.67 | x 6  | - 2104       | - 59.58         | )        |
| " " " "           | 11 | x 9  | - 99  | - 9.20 | x 6  | - 594        | - 16.82         | )        |
| " " " "           | 20 | x 14 | - 280 | -26.01 | x 5  | - 1400       | - 39.64         | )        |
| " " " "           | 17 | x 17 | - 289 | -26.85 | x 6  | - 1734       | - 49.10         | )        |
| " " " "           | 11 | x 8  | - 88  | - 8.17 | x 6  | - 528        | - 14.95         | )        |
|                   |    |      |       |        |      | <u>13032</u> | <u>- 369.00</u> | )        |

Tonnage to Mill:- 700

Wages Paid:- £182. 7s. Od.

Cost per Cu.M.:- 9s/10½d.



| MINE STATISTICS    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          | 1911.                      |          |                       |                           |          |         |
|--------------------|------|------------------|--------|----------|----------------------|--------|----------|--------------|--------|----------|-------|----------------------|--------|------------------------------|-------|----------------------------|----------|--------------------------------|----------|----------------------------|----------|-----------------------|---------------------------|----------|---------|
| Tons of Ore Mined. |      | Cubic Metres Cut |        |          | Tons per Cubic Metre |        |          | Days Worked. |        |          |       | Tons per Miner's Day |        | Cubic Metres per Miner's Day |       | Wages paid per Miner's Day |          | Wages paid per Underground Man |          | Wages paid per Cubic Metre |          | No. of Drills Working |                           | Dynamite |         |
| Headings.          | Dev. | Total            | In Ore | In Deads | Total                | In Ore | In Deads | Total        | In Ore | In Deads | Total | Bar-Deads            | In Ore | In Deads                     | Total | In Ore                     | In Deads | Total                          | Headings | Total                      | Headings | Total                 | Wages paid per ton of Ore | lbs      | per ton |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |
|                    |      |                  |        |          |                      |        |          |              |        |          |       |                      |        |                              |       |                            |          |                                |          |                            |          |                       |                           |          |         |

# COMPARATIVE STATEMENT.

Nentsbury ..... Rodderup .....

Nentsbury ..... Tons in Deads .....

Rodderup ..... Tons in Deads .....

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 447          | 10.15         |              |               |
| February  | 227          | 13.6          |              |               |
| March     | 369          | 11.7.         |              |               |
| April     |              |               |              |               |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings as assessed in Year 31st letter of 3rd June, 1912.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

## Report of Nenthead Mines April 1941

### REPORT OF NENTHEAD MINES.

APRIL 1941.

|                 | <u>Nentsbury.</u> | <u>Rampgill.</u>       | <u>Rodderup.</u> | <u>Totals.</u> |
|-----------------|-------------------|------------------------|------------------|----------------|
| Ore Mined       | Nil.              | We remove monthly from | 765 Tons         | 765 Tons       |
| Ore Milled      | Nil.              | Rampgill, belts, and   | 765 "            | 765 "          |
| Lead Ore Concs. | Nil.              | steel shafts etc., for | 77.3 "           | 77.3 "         |
| % of Galena     | Nil.              | repairing Rodderup.    | 10.1%            | 10.1%          |
| Hours Worked    | Nil.              |                        | 148 hours        | 148 hours.     |
| Tons per hour   | Nil.              |                        | 5.17 Tons        | 5.17 Tons.     |

Note: The output from Rodderup for April, owing to an oversight was ended on April 26th instead of April 30th. The full output for the month of April up to and including April 30th, amounted to 855 Tons of ore mined and washed. The output of Galena concentrates would have been 86.3 Tons. The balance will be carried forward to May results.

### S T O C K S .

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>           | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|----------------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.                       | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | 50 Tons           | Nil.             | 150 Tons (approx. 28% Zn.) | Nil.             | 200 Tons.      |

Rough Blende.... Nil.  
Fine Blende..... Nil.

Galena at Nentsbury, Nil.      Potters Ore at Nentsbury, Nil.  
" " Rodderup, 93.321 Tons.      " " " Rodderup, 10.895 Tons

|          |                       |          |
|----------|-----------------------|----------|
| COAL,    | consumed at Rampgill, | 1.5 Tons |
| FUEL OIL | " " "                 | Nil.     |
| " "      | " Nentsbury,          | Nil.     |
| " "      | " Rodderup,           | Nil.     |

COMPRESSED AIR produced at Nenthead, from Water Power only. A small quantity was produced intermittently to supply power and for testing both the Water and Air Pipe Lines.

COMPRESSED AIR produced at Rodderup from Water Power and Electricity equal to about 500 cu.ft. per minute, at an air pressure at the face of 80 to 85 lbs. per square inch.

## **NENTHEAD MINES**

### **APRIL 1941**

NENTSBURY MINE. During the month, air and water pipe-lines have been repaired and tested. Some of the 12" diam. pipes carrying water from Perry Dam to Middlecleugh had to be replaced with good second-hand pipes, and a few more lengths will have to be replaced during May. It was also necessary to replace some 6" pipes carrying Compressed Air. These are now in good condition. Towards the end of May we expect to commence mining Lead Ore in Nentsbury on a small scale. Power for drilling etc. will be supplied from Water power. It is anticipated that all costs of working will be met from revenue.

RODDERUP FELL. The note on page 1, will explain that the correct figures for the output from Rodderup for the month of April (ending April 30th) should have been 855 Tons of ore mined and crushed for a recovery of 86.3 Tons of Lead Concentrates. The number of hours worked should have been 166, the recovery 10.09% and the tons per hour 5.15. By an oversight the month's figures were calculated for the month ending on the 26th instead of the 30th April. The difference will be carried forward to May. It will be remembered that our month ended on the 26th in the past. The date was altered to end on the 31st day of December and on the last day of each month, to fit with the Income Tax year ends.

The outlook at Rodderup shows little change underground. The ore mined is from the top of the Tyne Bottom Limestone the height worked on average being 6ft. It is not possible with the limited supply of efficient labour to do any development, and as all work is confined to the flats, the mining of ore from various places is really development. We try to open up at least two flats in readiness for any falling off in values in a flat worked. The outlook can be considered satisfactory.

MILL. In good condition.

SALE OF GRAVEL & STONES. The sale of Stones and Gravel was 1351.3 Tons. The prices are the same as previous months.

GENERAL. The final figures for the year ended December 31st 1940, have not yet been finally agreed with H. M. Inspector of Taxes. The Accountants are in communication with them re: the Co.'s capital and how it affects Excess Profits Tax. It seems that the nett profit for 1940 will amount to about £3500. The outlook for 1941 may be considered encouraging if conditions and prices are approximately the same as during 1940.

RODDERUP FELL MINE.

Development Footage: Nil.

West Flats.

J. Johnson & Partners.

416<sup>3</sup>/<sub>4</sub> Days Worked.

| No.   | Flat | Ettn. | L  | W    | S.F.  | S.M.    | H.   | C.F.   | C.M.    | )       |
|-------|------|-------|----|------|-------|---------|------|--------|---------|---------|
| No. 5 | Flat | Ettn. | 13 | x 16 | - 208 | - 19.32 | x 15 | - 3120 | - 88.34 | )       |
| " 4   | "    | Top   | 15 | x 20 | - 300 | - 27.87 | x 6  | - 1800 | - 50.97 | )       |
| " "   | "    | "     | 19 | x 16 | - 304 | - 28.24 | x 6  | - 1824 | - 51.65 | )       |
| " "   | "    | "     | 27 | x 21 | - 567 | - 52.67 | x 6  | - 3402 | - 96.33 | )       |
| " "   | "    | "     | 15 | x 19 | - 285 | - 26.48 | x 6  | - 1710 | - 48.42 | )       |
| " "   | "    | "     | 17 | x 16 | - 272 | - 25.27 | x 5  | - 1360 | - 38.51 | )       |
| " "   | "    | "     | 20 | x 14 | - 280 | - 26.01 | x 5  | - 1400 | - 39.64 | )       |
| " 3   | "    | "     | 21 | x 20 | - 420 | - 39.02 | x 6  | - 2520 | - 71.35 | )       |
|       |      |       |    |      |       |         |      |        | 17136   | -485.21 |

③ Days Wages

Tonnage to Mill:- 855

Wages Paid: £208: 7s: -.

Cost per Cu.M.:- 8s/7d.

# MINE STATISTICS

April 1941.

|             | Tons of Ore Mined. |      |       | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked. |          |       |       |        |       | Tons per Miner's Day |       | Cubic Metres per Miner's Day |      | Per Underground Man |      | Wages paid per Miner's Day |          | Wages paid per Underground Man |          | Wages paid per Cubic Metre |      | No. of Drills Working | Dynamite |        |          |       |        |
|-------------|--------------------|------|-------|------------------|----------|-------|----------------------|----------|-------|--------------|----------|-------|-------|--------|-------|----------------------|-------|------------------------------|------|---------------------|------|----------------------------|----------|--------------------------------|----------|----------------------------|------|-----------------------|----------|--------|----------|-------|--------|
|             | Headings.          | Dev. | Total | In Ore           | In Deads | Total | Miners               |          |       | Labourers    |          |       | Total | In Ore | Total | In Ore               | Total | Cubic Metres                 | Tons | Headings            | Dev. | Total                      | Headings | Total                          | Headings | Total                      | lbs. |                       | per ton  |        |          |       |        |
|             |                    |      |       |                  |          |       | In Ore               | In Deads | Total | In Ore       | In Deads | Total |       |        |       |                      |       |                              |      |                     |      |                            |          |                                |          |                            |      |                       |          | In Ore | In Deads | Total | In Ore |
| Nentsbury   |                    |      |       |                  |          |       |                      |          |       |              |          |       |       |        |       |                      |       |                              |      |                     |      |                            |          |                                |          |                            |      |                       |          |        |          |       |        |
| ...Mos. Av. |                    |      |       |                  |          |       |                      |          |       |              |          |       |       |        |       |                      |       |                              |      |                     |      |                            |          |                                |          |                            |      |                       |          |        |          |       |        |
| ...Mos. Av. |                    |      |       |                  |          |       |                      |          |       |              |          |       |       |        |       |                      |       |                              |      |                     |      |                            |          |                                |          |                            |      |                       |          |        |          |       |        |
| Rodderup    | 860                | -    | 860   | 885              | -        | 885   | 1.77                 | -        | 1.77  | 117          | -        | 116   | -     | 533    | -     | 533                  | 2.06  | 2.06                         | 1.16 | 1.16                | 1.01 | 0.91                       | 101      | -                              | 101      | 917                        | 417  | 1017                  | 1017     | 5115   | 1        | 909   | 105    |
| ...Mos. Av. | 670                | -    | 670   | 341              | 7        | 348   | 1.90                 | -        | 1.92  | 320          | 12       | 69    | -     | 401    | -     | 401                  | 2.04  | 2.02                         | 1.06 | 1.04                | 1.07 | 0.86                       | 101      | 101                            | 101      | 915                        | 415  | 1115                  | 1117     | 5442   | 6        | 635   | 045    |
| ...Mos. Av. | 717                | -    | 717   | 377              | 5        | 382   | 1.90                 | -        | 1.88  | 344          | 9        | 81    | -     | 434    | -     | 434                  | 2.08  | 2.05                         | 1.10 | 1.08                | 1.05 | 0.88                       | 101      | 101                            | 101      | 915                        | 415  | 1115                  | 1115     | 5110   | 6        | 704   | 048    |

## COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱..... Rodderup .....✱

Nentsbury ..... Tons in Deads ....  
Rodderup ..... Tons in Deads ....

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 447          | 107           | 107          | 107           |
| February  | 227          | 135           | 135          | 135           |
| March     | 369          | 117           | 117          | 117           |
| April     | 485          | 107           | 107          | 107           |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

# Report of Nenthead Mines May 1941

## REPORT OF NENTHEAD

### MINE S.

MAY 1941.

|                 | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|-----------------|-------------------|------------------|------------------|----------------|
| Ore Mined       | 55 Tons.          | Engines,         | 1035 Tons        | 1090 Tons      |
| Ore Milled      | 55 "              | Motors and       | 1035 "           | 1090 "         |
| Lead Ore Concs. | 4.00 "            | heavy mach       |                  |                |
| % of Galena     | 7.24%             | inery kept       | 95.35 "          | 95.35 "        |
| Hours Worked    | 14 hours          | in good          | 10.11%           | 7.24% 10.11%   |
| Tons per hour   | 3.93 tons         | order.           | 204 hrs.         | 14 204 hrs.    |
|                 |                   | Parts for        |                  |                |
|                 |                   | repairing        |                  |                |
|                 |                   | Rodderup         |                  |                |
|                 |                   | and Nents        |                  |                |
|                 |                   | bury, Wilf       |                  |                |
|                 |                   | ley and          |                  |                |
|                 |                   | James Tabl       |                  |                |
|                 |                   | as moved.        |                  |                |

Note: Included in Rodderup Return is 9 Tons of Concentrates from 90 Tons of ore brought forward from April month. Nentsbury output was the result of a day's running of the mill preparatory to commencing steadily in June.

### STOCKS.

|                  | <u>Nentsbury</u> | <u>Rampgill.</u> | <u>Rodderup.</u>  | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|------------------|------------------|-------------------|------------------|----------------|
| Crude Ore        | Nil.             | Nil.             | Nil.              | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | 50 Tons          | Nil.             | 150 Tons          | Nil.             | 200 "          |
|                  |                  |                  | (Approx. 28% Zn.) |                  |                |

Rough Blende.....Nil.  
Fine Blende.....Nil.

Galena at Nentsbury, 2.500 Tons; Potters Ore at Nentsbury, 1.500 Tons  
" " Rodderup, 73.463 " ; " " " Rodderup, 20.895 "

|          |                      |          |
|----------|----------------------|----------|
| COAL     | consumed at Rampgill | 1.3 Tons |
| Fuel Oil | " " "                | Nil.     |
| " "      | " " Nentsbury        | 0.2 "    |
| " "      | " " Rodderup         | Nil.     |

COMPRESSED AIR produced at Nenthead from Water Power only. After repairing the water pipe-line from Perry Dam to Middle-clough and the 6" Air pipe-line, we have put both lines in a fair state of repair, and with a good supply of water can produce from 800 to 900 cu.ft. of Compressed Air per minute at 80lbs. pressure in the mine.

COMPRESSED AIR produced at Rodderup from Water Power and Electricity equals about 500 to 600 cubic feet per minute at 80 to 85 lbs pressure in the mine.

## **NENTHEAD MINES MAY 1941**

NENTSBURY MINE. Nentsbury mine is now cleaned up and towards the end of the month, a day's milling resulted in the recovery of 4 Tons of Galena from 55 Tons of ore crushed. The percentage of Galena was 7.24%. I anticipate an improvement in grade and output in June. A small number only of men are employed at Nentsbury and excluding management charges, I consider an output of 25 tons of Galena concentrates monthly at the price per ton now ruling will meet all costs including Royalty, Rates, & Taxes. There will also be a small revenue from Gravel, all of which is sold in advance at 4s/- per ton on site.

RODDERUP FELL. The note on page 1, will explain why Rodderup output amounted to 95.35 Tons. The percentage recovery was approximately the same. Underground, the values of the ore in the Flats are unchanged, and Conditions are similar to those reported recently. Labour troubles, mainly shortage of efficient labour, present a difficult problem. The Government, although one department is urgently asking and almost demanding an increase of output, is through another department, calling up the most efficient men for military service. Wages will increase as time passes, and general expenses rise.

Up to date we are holding our own.

MILLS. The mills at Rodderup and Nentsbury are in good condition. Wilfley and James Tables have been removed from Rampgill to both Mills and the old Vanner tables dismantled. These were out-of-date and beyond repair. The efficiency of both mills should increase.

SALES OF GRAVEL AND STONES. During the month 2275 Tons of Stone and Gravel were sold. The profit from these sales amounted to £262. 15. 8d. The profit is not actually profit made this year, but is from stones and chippings put into stock in previous years. Unfortunately most of the stock is now sold and dispatched.

FLUOR SPAR. Tests have been made in Nentsbury Mill on material brought from the heaps at Middle Level, Rodderup. These tests have been made at the request of the Government. Tests have also been made at Nentsbury on Fluor Spar residues from the Firestone Heaps at Nenthead. The analyses indicate that the re-treatment of the heaps may be payable. More tests will be made and more data obtained.



RODDERUP MINE - MAY 1941.

Development Footage :- Nil.

West Flats.

J. Johnston & Partners.

408½ Days Worked.

|              | L  | W    | S.F.  | S.M.    | H.   | C.F.         | C.M.            |   |
|--------------|----|------|-------|---------|------|--------------|-----------------|---|
| No. 5 Bottom | 11 | x 13 | - 143 | - 13.29 | x 14 | - 2002       | - 56.69         | ) |
| " 4 Top      | 17 | x 24 | - 408 | - 37.90 | x 6  | - 2448       | - 69.32         | ) |
| " " "        | 16 | x 16 | - 256 | - 23.78 | x 5  | - 1280       | - 36.24         | ) |
| " " "        | 20 | x 16 | - 320 | - 29.73 | x 6  | - 1920       | - 54.36         | ) |
| " " "        | 18 | x 20 | - 360 | - 33.44 | x 6  | - 2160       | - 61.16         | ) |
| " " "        | 30 | x 23 | - 690 | - 64.10 | x 6  | - 4140       | - 117.22        | ) |
| " " Side     | 18 | x 6  | - 108 | - 10.03 | x 6  | - 648        | - 18.35         | ) |
| " 2 Bottom   | 8  | x 11 | - 88  | - 8.17  | x 6  | - 528        | - 14.95         | ) |
|              |    |      |       |         |      | <u>15126</u> | <u>- 428.29</u> | ) |

@ Days Wages

Tonnage to Mill:- 945

Wages Paid:- £204. 5. 0.

Cost per Cu.M.:- 9s/6d.

1941.

May

1941.

[illegible]

## COMPARATIVE STATEMENT.

✠..... Nentsbury .....✠..... Rodderup .....✠

|           |      |              |      |
|-----------|------|--------------|------|
| Nentsbury | .... | Tons in Dead | .... |
|-----------|------|--------------|------|

|          |      |                |      |
|----------|------|----------------|------|
| Rodderup | .... | 'Tons in Deads | .... |
|----------|------|----------------|------|

Wages paid per Cubic Metre in Headings as suggested in your EX-111 letter of 3rd June, 1932.

Nentsbury

|  |          |
|--|----------|
|  | Mos. Av. |
|  | Mos. Av. |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 447          | 10/-          |
| February  |              |               | 227          | 13/3          |
| March     |              |               | 369          | 4/7           |
| April     |              |               | 485          | 10/7          |
| May       |              |               | 428          | 4/3           |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

# Report of Nenthead Mines June 1941

## REPORT OF NENTHEAD

### MINE S.

JUNE 1941.

|                       | <u>Nentsbury.</u> | <u>Rampgill.</u>      | <u>Rodderup.</u> | <u>Totals.</u>       |
|-----------------------|-------------------|-----------------------|------------------|----------------------|
| Ore Mined             | 277 Tons          | Conditions unchanged. | 770 Tons         | 1047 Tons            |
| Ore Milled            | 277 "             |                       | 770 "            | 1047 "               |
| Lead Ore Concs. prod. | 29.05 "           |                       | 77.95 "          | 109.00 "             |
| % of Galena           | 10.49%            |                       | 10.12%           | N. R.<br>10.49 10.12 |
| Hours Worked          | 74 hours          |                       | 152 hours        | 74 152               |
| Tons per hour         | 3.74 Tons         |                       | 5.06 Tons        | 3.74 5.06 Tons       |

### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>  | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|-------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.              | 2500 Tons        | 2500 Tons.     |
| Blende-Witherite | 50 Tons           | Nil.             | 150 Tons          | Nil.             | 200 Tons.      |
|                  |                   |                  | (Approx. 28% Zn.) |                  |                |

Rough Blende..... Nil.  
Fine Blende..... Nil.

Galena at Nentsbury, 20.750 Tons; Potters Ore at Nentsbury, 3.750 Tons.  
" " Rodderup, 32.558 " ; " " Rodderup, Nil.

COAL consumed at Rampgill, 1.50 Tons.  
FUEL OIL " " Nil.  
" " " Nentsbury, Nil.  
" " " Rodderup, Nil.

COMPRESSED AIR produced at Nenthead from Water Power only. Quantity produced approximately 700 cu. ft. per minute at about 80 lbs. pressure per square inch in the mine.

COMPRESSED AIR produced at Rodderup from Water Power and Electricity, about 550 cu. ft. per minute at an air pressure of 80 to 85 lbs. per square inch in the mine.

## **NENTHEAD MINES JUNE 1941**

NENTSBURY MINE. The output of Ore for June was 277 Tons.

The recovery was 29.05 Tons of Galena Concentrates, and the percentage recovered amounted to 10.49%. I anticipated a higher recovery than in May, but the percentage for June was even higher than I anticipated. If we can continue producing about 30 Tons of Concentrates monthly with the number of men now employed, all costs will be met, other than management costs, and, possibly, these may be met later. We are working in different parts of the Mine in the lead veins, mainly on branches, and shall drive short distance monthly on these to maintain the necessary output.

MILL. Nentsbury Mill is in good condition. We have removed the old tables from this mill, and substituted Wilfleys from Rampgill Mill.

RODDERUP FELL. Mining in Rodderup is carried on in the Flats with the limited amount of Labour we can get. Many of the younger men have been called to the Forces, and some older men have left the district to work in aerodromes under Government control. We are producing the utmost we can with the labour supply at our disposal, and unless something unforeseen occurs, it seems we can carry on, and with Nentsbury meeting the costs of labour, rent and rates etc., we should continue to make a small profit.

MILL. The mill is in good running order.

SALE OF STONE & GRAVEL. The stocks of Gravel and Stone are almost exhausted and soon we shall have only the monthly output of both from both mines to sell. The monthly profit therefore will be less. We sold during the month 820.65 Tons, for a net profit of £158. 1. 3. The gravel (cuttings) will yield more profit per ton than the stones. Gravel is 4s/- per ton on site, and stone, 1s/4½d.

FLUOR SPAR. Experiments have been continued, and several tests made on parcels of 40 Tons in Nentsbury Mill. The results are encouraging, and if the results, not yet to hand, of the last samples sent for analysis, corroborate these previously obtained we shall probably run one half of Rampgill Mill if we can get the labour and produce fairly large quantities from Rodderup and Firestone heaps. We have found a market for all we can produce at prices likely to leave us a small profit per ton.

GENERAL. The general outlook is satisfactory, but we are controlled by Government regulations.

JUNE 1941.

RODDERUP MINE.

Development Footage:- Mil.

West Flats.

J. Johnston & Partners.

360 Days Worked.

|           | L  | W.   | S.F.  | S.M.    | H.  | C.F.   | C.M.     |   |
|-----------|----|------|-------|---------|-----|--------|----------|---|
| No.4 Flat | 21 | x 21 | - 441 | - 40.97 | x 6 | - 2646 | - 74.92  | ) |
| " "       | 25 | x 21 | - 525 | - 48.77 | x 6 | - 3150 | - 89.19  | ) |
| " "       | 27 | x 21 | - 567 | - 52.67 | x 6 | - 3402 | - 96.33  | ) |
| " "       | 13 | x 16 | - 208 | - 19.32 | x 6 | - 1248 | - 35.34  | ) |
| " "       | 11 | x 8  | - 88  | - 8.17  | x 6 | - 528  | - 14.95  | ) |
| " "       | 12 | x 12 | - 144 | - 13.38 | x 6 | - 864  | - 24.46  | ) |
| " "       | 10 | x 11 | - 110 | - 10.82 | x 6 | - 660  | - 18.69  | ) |
| No.5      | 19 | x 10 | - 190 | - 17.65 | x 8 | - 1520 | - 43.04  | ) |
|           |    |      |       |         |     | 14018  | - 396.92 | ) |

3 Days Wages

Tonnage to Mill:- 770.

Wages Paid: £180. 0. 0.

Cost per Cu.M.:- 9s/1d.

NEWTSEBURY MINE.

T. Hudspeeth & Partners.

187½ Days Worked.

Vein.

|                | L    | W   | S.F.  | S.M.    | H.   | C.F.   | C.M.     |   |
|----------------|------|-----|-------|---------|------|--------|----------|---|
| 1st Sun String | 15.5 | x 6 | - 93  | - 8.64  | x 12 | - 756  | - 21.40  | ) |
| Dupont S.      | 14.0 | x 6 | - 84  | - 7.80  | x 6  | - 504  | - 14.27  | ) |
| Liverick       | 27.0 | x 6 | - 162 | - 15.05 | x 16 | - 2592 | - 73.39  | ) |
| 2nd Sun X-cut  | 22.0 | x 6 | - 132 | - 12.26 | x 3  | - 396  | - 11.21  | ) |
| Sincay-Stope   | 14.0 | x 5 | - 70  | - 6.50  | x 10 | - 700  | - 19.82  | ) |
| " -Drive       | 6.0  | x 5 | - 30  | - 2.79  | x 9  | - 270  | - 7.64   | ) |
|                |      |     |       |         |      | 5218   | - 147.73 | ) |

3 Days Wages

Tonnage to Mill:- 332

Wages Paid: £94. 17. 4.

Cost per Cu.M.:- 12s/10d.

MINE STATISTICS *June* 1941.

|           | Tons of Ore Mined. |      |       | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked. |          |       | Tons per Miner's Day |          |       | Cubic Metres per Miner's Day |          |       | Per Underground Man |      |              | Wages paid per Miner's Day |      |       | Wages paid per Underground Man |       |          | Wages paid per Cubic Metre |      |         | No. of Drills Working |           | Dynamite |  |
|-----------|--------------------|------|-------|------------------|----------|-------|----------------------|----------|-------|--------------|----------|-------|----------------------|----------|-------|------------------------------|----------|-------|---------------------|------|--------------|----------------------------|------|-------|--------------------------------|-------|----------|----------------------------|------|---------|-----------------------|-----------|----------|--|
|           | Headings.          | Dev. | Total | In Ore           | In Deads | Total | In Ore               | In Deads | Total | In Ore       | In Deads | Total | In Ore               | In Deads | Total | In Ore                       | In Deads | Total | Cubic Metres        | Tons | Cubic Metres | Headings                   | Dev. | Total | Headings                       | Total | Headings | Total                      | lbs. | per ton |                       |           |          |  |
|           |                    |      |       |                  |          |       |                      |          |       |              |          |       |                      |          |       |                              |          |       |                     |      |              |                            |      |       |                                |       |          |                            |      |         | Miners                | Labourers |          |  |
| Nentsbury |                    |      |       |                  |          |       |                      |          |       |              |          |       |                      |          |       |                              |          |       |                     |      |              |                            |      |       |                                |       |          |                            |      |         |                       |           |          |  |
| 1 Mos Av  | 337                | -    | 337   | 148              | -        | 148   | 2.24                 | -        | 2.24  | 187          | -        | 53    | -                    | 240      | -     | 240                          | 1.78     | 1.78  | 0.79                | 0.79 | 1.39         | 0.61                       | 10/1 | -     | 10/1                           | 9/6   | 15/6     | 1576                       | 6/11 | 4       | 320                   | 105.      |          |  |
| 5 Mos Av  |                    |      |       |                  |          |       |                      |          |       |              |          |       |                      |          |       |                              |          |       |                     |      |              |                            |      |       |                                |       |          |                            |      |         |                       |           |          |  |
| Rodderup  | 170                | -    | 170   | 397              | -        | 397   | 1.93                 | -        | 1.93  | 360          | -        | 116   | -                    | 476      | -     | 476                          | 2.14     | 2.14  | 1.10                | 1.10 | 1.62         | 0.83                       | 10/1 | -     | 10/1                           | 9/8   | 41/7     | 11/7                       | 6/1  | 6       | 142                   | 0.97      |          |  |
| 5 Mos Av  | 763                | -    | 763   | 387              | 4        | 391   | 1.96                 | -        | 1.94  | 357          | 7        | 85    | -                    | 449      | -     | 449                          | 2.12     | 2.09  | 1.09                | 1.07 | 1.69         | 0.87                       | 10/1 | 10/1  | 9/12                           | 41/3  | 57/6     | 6                          | 136  | 0.97    |                       |           |          |  |
| 6 Mos Av  | 164                | -    | 164   | 389              | 3        | 392   | 1.95                 | -        | 1.94  | 357          | 6        | 90    | -                    | 453      | -     | 453                          | 2.12     | 2.10  | 1.09                | 1.07 | 1.68         | 0.86                       | 10/1 | 10/1  | 9/8                            | 41/4  | 57/6     | 6                          | 737  | 0.97    |                       |           |          |  |

COMPARATIVE STATEMENT.

✱ Nentsbury ✱ Rodderup ✱

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 447          | 10/1          |
| February  |              |               | 227          | 13/3          |
| March     |              |               | 369          | 4/7           |
| April     |              |               | 485          | 10/2          |
| May       |              |               | 428          | 4/3           |
| June      | 148          | 15/6          | 397          | 4/7           |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings as suggested at your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

# Report of Nenthead Mines July 1941

## REPORT OF NENTHEAD MINES.

JULY 1941.

|                    | <u>Nentsbury.</u> | <u>Rampgill.</u>      | <u>Rodderup.</u> | <u>Totals.</u>  |
|--------------------|-------------------|-----------------------|------------------|-----------------|
| Ore Mined          | 188 Tons.         | Conditions unchanged. | 885 Tons         | 1073 Tons.      |
| Ore Milled         | 188 "             |                       | 885 "            | 1073 "          |
| Lead Concs. prdcd. | 19.0 "            |                       | 89.20 "          | 108.2 "         |
| % of Galena        | 10.1%             |                       | 10.08%           | 10.1 10.08      |
| Hours Worked       | 57.5 hours        |                       | 174 hrs.         | 57.5 174 hrs.   |
| Tons per hour      | 3.27 Tons         |                       | 5.08 Tons        | 3.27 5.08 Tons. |

### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>              | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|-------------------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.                          | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | 50 Tons           | Nil.             | 150 Tons<br>(Approx. 28% Zn.) | Nil.             | 200 Tons       |

Rough Blende..... Nil.  
Fine Blende..... Nil.

Galena at Nentsbury, 5.250 Tons: Potters Ore at Nentsbury, 6.50 Tons.  
" " Rodderup, 25.348 " : " " " Rodderup, 10.25 "

COAL consumed at Rampgill, 2.0 Tons (including Ore  
FUEL OIL " " " " Nil. drying.)  
" " " " Nentsbury, Nil.  
" " " " Rodderup, Nil.

COMPRESSED AIR produced at NENTHEAD, from water power only, was limited to the water supply. For almost all the month, there was no rain, and only a small amount fell during June. The reservoirs were completely emptied early in July. This accounts for the low output from Nentsbury. When working, the output of Compressed Air was not more than 400 cu.ft. at 80 lbs. pressure.

COMPRESSED AIR produced at Rodderup from Water Power and Electricity, amounted to approximately 600 cu.ft. per minute at, from 80 to 85 lbs. pressure at the face.

## **NENTHEAD MINES**

### **JULY 1941**

NENTSBURY MINE. Owing to the scarcity of water, the output from Nentsbury dropped from 277 tons to 188 tons in July. The value dropped from 10.49% of Galena per ton to 10.1%. Concentrates recovered fell from 29.05 Tons Galena to 19 Tons Galena. Directly the Water Supply increases , the output, monthly, should return to about 30 Tons. During the month, no change, worth mentioning has occurred in the mine.

MILL. Nentsbury Mill is in good order.

RODDERUP FELL MINE. The output from Rodderup was rather better than in June. Here, as compared with Nentsbury we had the advantage of electrical power for Compressed Air, and the water supply, although, less than normal, was sufficient for washing purposes. In both mines and mills (Rodderup and Nentsbury) the position is acute, owing to shortage of labour, and there does not seem to be any hope of any relief in this direction.

MILL. In good order.

SALES OF GRAVEL & STONE. The sales of Gravel and Stone amounted to 944.7 Tons. The profit was £149. 14s. 6d. The output is now mainly confined to production, plus small quantities of Stones from old heaps. The prices are unchanged.

FLUOR SPAR. During the month a trial parcel of Fluor Spar amounting to 31.75 Tons was sold for 28/6 per ton f.o.r. Wearhead Station. This parcel was produced from Rodderup Middle Level dump and Firestone dump, . Nenthead. A Semi-Government Co., to be established near Whitehaven, have provisionally made an agreement with us to purchase 40 Tons weekly at 35s/- per ton f.o.r. Alston station. The factory will not be completed for 3 months. It would be an easy matter to produce saleable Fluor Spar from the heaps mentioned at a profit, if labour was available. Should more labour be taken from us, we may have to produce Fluor Spar from dumps instead of mining in one of our mines.

GENERAL. As reported last month, the position is entirely in the hands of the British Government, and we, like other Companies, are controlled by Government regulations.

SALES OF CONCENTRATES. Sales of Lead Concs. are made monthly to Messrs. Walkers Parker & Co., Newcastle, and Morris Ashby, London. For particulars see Office Sheets and Bank statements.



JULY 1941

RODDERUP MINE.

Development Footage:- Nil.

---

West Flats.

Jos. Johnston & Partners.

357½ Days Worked.

|              | L       | W | S.F. | S.M.    | H    | C.F.   | C.M. )                  |
|--------------|---------|---|------|---------|------|--------|-------------------------|
| No. 5 Bottom | 22 x 12 | - | 264  | - 24.52 | x 13 | - 3432 | - 97.18 )               |
| " 4 Top      | 15 x 16 | - | 240  | - 22.30 | x 6  | - 1440 | - 40.77 )               |
| " " "        | 21 x 20 | - | 420  | - 39.02 | x 6  | - 2520 | - 71.35 )               |
| " " "        | 23 x 19 | - | 437  | - 40.60 | x 6  | - 2622 | - 74.24 ) @ Days Wages. |
| " " "        | 19 x 24 | - | 456  | - 42.36 | x 6  | - 2736 | - 77.47 )               |
| " " "        | 17 x 12 | - | 204  | - 18.95 | x 6  | - 1224 | - 34.66 )               |
|              |         |   |      |         |      | 13274  | - 395.67 )              |

Tonnage to Mill:- 885 Tons.

Wages Paid:- £187: 16s: 4d.

Cost per Cu.M.:- 9s/6d.

---

NENTSBURY MINES.

John Armstrong & Partners.

116 Days Worked.

Vein.

|                       | L       | H | S.F. | S.M.    | W.  | C.F.   | C.M. )           |
|-----------------------|---------|---|------|---------|-----|--------|------------------|
| 2nd Sun X-cut         | 13 x 6  | - | 78   | - 7.25  | x 6 | - 468  | - 13.25 )        |
| Sincay V. - string.   | 15 x 15 | - | 225  | - 20.90 | x 6 | - 1350 | - 38.22 ) @ Days |
| Liverick V. S. of S.2 | 9 x 16  | - | 144  | - 13.38 | x 6 | - 864  | - 24.46 ) Wages. |
|                       |         |   |      |         |     | 2612   | - 75.93 )        |

Tonnage to Mill:- 188 Tons

Wages Paid:- £63: 1s: -d.

Cost per Cu.M.:- 16s/7d.

---

# MINE STATISTICS

1911.

July

|           | Tons of Ore Mined.   |   |     | Cubic Metres Cut      |   |     | Tons per Cubic Metre  |   |      | Days Worked.          |   |     |                                  |     | Tons per Miner's Day |       |     | Per Underground Man |              |      | Wages paid per Miner's Day |              |      | Wages paid per Underground Man |                            |      | Wages paid per Cubic Metre |                      |      | No. of Drills Working |                      |     | Dynamite |                      |  |  |             |  |  |
|-----------|----------------------|---|-----|-----------------------|---|-----|-----------------------|---|------|-----------------------|---|-----|----------------------------------|-----|----------------------|-------|-----|---------------------|--------------|------|----------------------------|--------------|------|--------------------------------|----------------------------|------|----------------------------|----------------------|------|-----------------------|----------------------|-----|----------|----------------------|--|--|-------------|--|--|
|           | Headings. Dev. Total |   |     | In Ore In Deads Total |   |     | In Ore In Deads Total |   |      | In Ore In Deads Total |   |     | In Ore In Deads Wages gains Bar. |     |                      | Total |     |                     | In Ore Total |      |                            | In Ore Total |      |                                | Cubic Metres Headings Dev. |      |                            | Total Headings Total |      |                       | Total Headings Total |     |          | Total Headings Total |  |  | lbs. person |  |  |
|           |                      |   |     |                       |   |     |                       |   |      |                       |   |     |                                  |     |                      |       |     |                     |              |      |                            |              |      |                                |                            |      |                            |                      |      |                       |                      |     |          |                      |  |  |             |  |  |
| Nentsbury | 188                  | - | 188 | 76                    | - | 76  | 2.48                  | - | 2.48 | 116                   | - | 116 | -                                | 157 | -                    | 157   | 162 | 162                 | 0.66         | 0.66 | 1.19                       | 0.48         | 1010 | -                              | 1010                       | 1011 | 1011                       | 2010                 | 2010 | 815                   | 3                    | 100 | 0.53     |                      |  |  |             |  |  |
| 1 Mos Av  | 332                  | - | 332 | 148                   | - | 148 | 2.24                  | - | 2.24 | 187                   | - | 187 | -                                | 240 | -                    | 240   | 178 | 178                 | 0.74         | 0.74 | 1.39                       | 0.61         | 1011 | -                              | 1011                       | 916  | 916                        | 1516                 | 1516 | 1411                  | 4                    | 350 | 1.05     |                      |  |  |             |  |  |
| 2 Mos Av  | 260                  | - | 260 | 112                   | - | 112 | 2.36                  | - | 2.36 | 151                   | - | 151 | -                                | 198 | -                    | 198   | 170 | 170                 | 0.72         | 0.72 | 1.29                       | 0.54         | 1015 | -                              | 1015                       | 919  | 919                        | 1812                 | 1812 | 718                   | 3                    | 225 | 0.79     |                      |  |  |             |  |  |
| Rodderup  | 885                  | - | 885 | 396                   | - | 396 | 2.23                  | - | 2.23 | 358                   | - | 358 | -                                | 439 | -                    | 439   | 247 | 247                 | 1.10         | 1.10 | 2.02                       | 0.90         | 1016 | -                              | 1016                       | 911  | 911                        | 111                  | 111  | 411                   | 5                    | 848 | 0.96     |                      |  |  |             |  |  |
| 1 Mos Av  | 760                  | - | 760 | 389                   | 3 | 392 | 1.95                  | - | 1.94 | 357                   | 6 | 363 | -                                | 453 | -                    | 453   | 212 | 210                 | 1.09         | 1.07 | 1.68                       | 0.86         | 101  | -                              | 101                        | 918  | 918                        | 1114                 | 1114 | 518                   | 6                    | 737 | 0.97     |                      |  |  |             |  |  |
| 2 Mos Av  | 781                  | - | 781 | 390                   | 3 | 393 | 1.99                  | - | 1.98 | 357                   | 5 | 362 | -                                | 451 | -                    | 451   | 217 | 215                 | 1.09         | 1.07 | 1.73                       | 0.87         | 1011 | -                              | 1011                       | 919  | 919                        | 1113                 | 1113 | 517                   | 6                    | 753 | 0.97     |                      |  |  |             |  |  |

## COMPARATIVE STATEMENT.

Nentsbury      Tons in Deeds      Rodderup

Nentsbury      Rodderup

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1931.

Nentsbury

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 447          | 101           | 447          | 101           |
| February  | 227          | 1513          | 227          | 1513          |
| March     | 369          | 1117          | 369          | 1117          |
| April     | 485          | 1017          | 485          | 1017          |
| May       | 428          | 1113          | 428          | 1113          |
| June      | 397          | 1117          | 397          | 1117          |
| July      | 396          | 111           | 396          | 111           |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

# Report of Nenthead Mines August 1941

## REPORT OF NENTHEAD MINES

AUGUST 1941.

|                    | <u>Nentsbury.</u> | <u>Rampgill.</u>      | <u>Rodderup.</u> | <u>Totals.</u>    |
|--------------------|-------------------|-----------------------|------------------|-------------------|
| Ore Mined          | 327 Tons          | Conditions unchanged. | 820 Tons         | 1147 Tons.        |
| Ore Milled         | 327 "             |                       | 820 "            | 1147 "            |
| Lead Cones. prdcd. | 27.25 "           |                       | 84.60 "          | 111.85 "          |
| % of Galena        | 8.33%             |                       | 10.31%           | N. 8.33 R. 10.31% |
| Hours Worked       | 94.50 hours       |                       | 163 hours        | 94.50 163.00 hrs. |
| Tons per hour      | 3.46 Tons         |                       | 5.03 Tons        | 3.46 5.03 Tons.   |

### S T O C K S.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>             | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.                         | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | 50 Tons           | Nil.             | 150 Tons<br>(approx.28% Zn.) | Nil.             | 200 "          |

Rough Blende.....Nil.  
Fine Blende.....Nil.

Galena at Nentsbury, 16.350 Tons: Potters Ore at Nentsbury, 3.250 Tons  
" " Rodderup, 0.173 " : " " Rodderup, 7.200 "

Coal consumed at Rampgill, 2.00 Tons  
Fuel Oil " " " , 0.25 "  
" " " " Nentsbury, 1.00 "  
" " " " Rodderup, 0.31 "

COMPRESSED AIR produced at NENTHEAD, from water power only, approximated 500 cu.ft. per minute at a pressure of 80 lbs. per square inch.

COMPRESSED AIR produced at RODDERUP, from Electricity and water power amounted to approximately 600 cu. ft. per minute at from 80 to 85 lbs. per square inch at the face.

## **NENTHEAD MINES AUGUST 1941**

NENTSBURY MINE. The output of ore and concentrates produced at Nentsbury amounted to 327 Tons of Ore and 27.25 Tons of Concentrates. The percentage recovery was 8.33%. The grade was lower but this I anticipated. A grade of 10% is above the value of Lead Ore left in Nentsbury.

MILL. Nentsbury Mill is in good order.

RODDERUP FELL MINE. The output from Rodderup is practically the same as for July. The August holiday affected the output by one day. July tonnage amounted to 885 Tons for 89.2 Tons of Concentrates, a recovery of 10.08%. The figures for August were 820 Tons of Ore, 84.6 Tons of Concentrates and a recovery of 10.31%.

MILL. In good order.

SALE OF GRAVEL & STONE. The sales now depend upon the actual output from the Mills. These amounted to 562.7 Tons. The profit was £89. 17. 4.

FLUOR SPAR. The output of Fluor Spar depends entirely as to whether we can obtain labour. On one hand Government officials are urging us to produce Fluor Spar, and at the same time another Government department is calling up members of our labour force to Join the Armed Forces. Up to the present the War Office seems to be the stronger and as a consequence we are losing monthly some of our young men. There is no supply we can tap to obtain substitutes.

SALES OF LEAD ORE. These are made monthly to Messrs. Morris Ashby Ltd., London, and to Messrs. Walkers Parker & Co., Ltd., Newcastle and our relations with both are satisfactory.

GENERAL. In all departments in both mines, both above and below ground, the labour shortage is most acute. I see no chance of any improvement in this connection. Under most trying and difficult circumstances, we are doing all we can to keep the mines open and the Company's property intact, without incurring financial loss.



# MINE STATISTICS

August 1941.

|           | Tons of Ore Mined. |      |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |       | Days Worked. |         |       | Tons per Miner's Day |         |       | Cubic Metres per Miner's Day |       |        | Per Underground Man |      |              | Wages paid per Underground Man |         |       | Wages paid per ton of Ore      |         |          | Dynamite              |      |         |       |
|-----------|--------------------|------|-------|------------------|---------|-------|----------------------|---------|-------|--------------|---------|-------|----------------------|---------|-------|------------------------------|-------|--------|---------------------|------|--------------|--------------------------------|---------|-------|--------------------------------|---------|----------|-----------------------|------|---------|-------|
|           | Headings.          | Dev. | Total | In Ore           | In Dead | Total | In Ore               | In Dead | Total | Miners       |         |       | Labourers            |         |       | In Ore                       | Total | In Ore | Total               | Tons | Cubic Metres | Wages paid per Miner's Day     |         |       | Wages paid per Underground Man |         |          | No. of Drills Working | lbs. | per ton |       |
|           |                    |      |       |                  |         |       |                      |         |       | In Ore       | In Dead | Total | In Ore               | In Dead | Total |                              |       |        |                     |      |              | In Ore                         | In Dead | Total | Headings                       | Total   | Headings |                       |      |         | Total |
|           |                    |      |       |                  |         |       |                      |         |       |              |         |       |                      |         |       |                              |       |        |                     |      |              |                                |         |       |                                |         |          |                       |      |         |       |
| Nentsbury | 327                | -    | 327   | 184              | -       | 184   | 1.78                 | 204     | -     | 204          | 54      | -     | 208                  | -       | 208   | 1.60                         | 1.60  | 0.90   | 0.90                | 1.27 | 0.71         | 11/6                           | -       | 11/6  | 10/11                          | 10/11   | 157 1/2  | 8 1/4                 | 4    | 202     | 0.62. |
| 2 Mos Av  | 260                | -    | 260   | 112              | -       | 112   | 2.36                 | 151     | -     | 151          | 47      | -     | 198                  | -       | 198   | 1.70                         | 1.70  | 0.72   | 0.72                | 1.29 | 0.54         | 10/53                          | -       | 10/53 | 9/9 1/2                        | 9/9 1/2 | 18 1/2   | 7/10                  | 3    | 255     | 0.79. |
| 3 Mos Av  | 287                | -    | 287   | 136              | -       | 136   | 2.20                 | 169     | -     | 169          | 49      | -     | 218                  | -       | 218   | 1.67                         | 1.67  | 0.78   | 0.78                | 1.28 | 0.60         | 10/95                          | -       | 10/95 | 10/2                           | 10/2    | 17 1/2   | 8 1/4                 | 3    | 217     | 0.77. |
| Rodderup  | 820                | -    | 820   | 301              | -       | 301   | 2.72                 | 390     | -     | 390          | 97      | -     | 387                  | -       | 387   | 2.82                         | 2.82  | 1.04   | 1.04                | 2.12 | 0.78         | 11/25                          | -       | 11/25 | 10/7                           | 10/7    | 13 1/7   | 57                    | 5    | 736     | 0.90. |
| 1 Mos Av  | 181                | -    | 181   | 390              | 3       | 393   | 1.99                 | 357     | 5     | 362          | 89      | -     | 451                  | -       | 451   | 2.17                         | 2.15  | 1.09   | 1.09                | 1.73 | 0.87         | 10/1                           | 10/1    | 10/1  | 9/9                            | 9/9     | 11/3     | 57 1/2                | 6    | 753     | 0.97. |
| 8 Mos Av  | 186                | -    | 186   | 379              | 3       | 382   | 2.08                 | 349     | 4     | 353          | 96      | -     | 443                  | -       | 443   | 2.25                         | 2.23  | 1.08   | 1.07                | 1.78 | 0.86         | 10/25                          | 10/1    | 10/25 | 9/10                           | 9/10    | 11/6 1/2 | 516                   | 6    | 751     | 0.96. |

## COMPARATIVE STATEMENT.

Nentsbury ..... Nentsbury ..... Rodderup .....

Nentsbury ..... Tons in Deaths .....

Rodderup ..... Tons in Deaths .....

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 447          | 10/-          |              |               |
| February  | 227          | 13/3          |              |               |
| March     | 369          | 11/7          |              |               |
| April     | 485          | 10/7          |              |               |
| May       | 428          | 11/3          |              |               |
| June      | 397          | 11/7          |              |               |
| July      | 396          | 11/-          |              |               |
| August    | 301          | 13/7          |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report of Nenthead Mines September 1941

### REPORT OF NENTHEAD MINES SEPTEMBER 1941.

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u>      | <u>Rodderup.</u> | <u>Totals.</u>   |
|-------------------|-------------------|-----------------------|------------------|------------------|
| Ore Mined         | 292 Tons          | Conditions unchanged. | 900 Tons         | 1192 Tons.       |
| Ore Milled        | 292 "             |                       | 900 "            | 1192 "           |
| Lead Concs. prcd. | 24.00 "           |                       | 93.85 "          | 117.85 "         |
| % of Galena       | 8.22%             |                       | 10.43%           | 8.22% 10.43%     |
| Hours Worked      | 84.50 Hours       |                       | 182 hours        | 84.50 182 hours. |
| Tons per Hour     | 3.45 Tons         |                       | 4.95 Tons        | 3.45 4.95 Tons   |

### S T O C K S .

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>     | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|----------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.                 | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | 50 Tons           | Nil.             | 150 Tons             | Nil.             | 200 Tons       |
|                  |                   |                  | (Approx. 28% Blende) |                  |                |

Rough Blende.....Nil.

Fine Blende .....Nil.

Galena at Nentsbury, 35.100 Tons; Potters Ore at Nentsbury, 4.50 Tons  
 " " Rodderup, 51.673 " ; " " Rodderup, 13.55 "

Coal consumed at Rampgill, 2.50 Tons.  
 Fuel Oil " " , 0.25 "  
 " " " Nentsbury, 1.25 "  
 " " " Rodderup, 0.25 "

COMPRESSED AIR produced at NENTHEAD, from water power only, approximated  
 500 cu.ft. per minute at pressure of  
 80 lbs. per square inch.

COMPRESSED AIR produced at RODDERUP, from electricity and water power,  
 amounted to approximately 650 cu.ft.  
 per minute at 80 to 85 lbs. pressure.

## **NENTHEAD MINES SEPTEMBER 1941**

NENTSBURY MINE. Owing to labour shortage, the output of ore was less than in August, and the grade was slightly lower. Men of military age are called to the forces, and these cannot be replaced by older men as none are available. We can only fill the losses with boys when available, and these now command almost men's wages. The output for the month was 292 Tons of Ore mined and milled for a recovery of 24 tons of concentrates, equals 8.22%.

MILL. In good order.

RODDERUP MINE. The output for Sept, was higher in both the quantity of ore and in the grade of ore. The tonnage was 900, and the percentage recovery 10.43%, giving 93.85 Tons concentrates. Fortunately, in Rodderup, two flats continue to yield high grade ore, and although we have lost one miner and one mill-man, we managed to maintain the output. Constant application is made for the exemption of miners and mill-men, with varying results.

SALES OF LEAD ORE. These are made at about monthly intervals to Messrs. Walkers Parker & Co., Newcastle, and Messrs. Morris Ashby Ltd., Our relations with these firms are cordial and payments are promptly made.

GENERAL. Under existing circumstances every effort is made to maintain the maximum output of Lead Ore, and to turn to account, all gravel produced to reputable firms who have also paid all accounts promptly, as has also the buyer of the Fluor Spar produced and sold.

We have so far managed to keep the mines going on a limited scale at a small profit. If it were possible to make a big profit, which it is not, all profits over a certain percentage would be claimed by the Government under Excess Profits Tax.



S E P T E M B E R      1 9 4 1.

R o d d e r u p   M i n e.  
 @@@@  
 @@@@

Development Footage: Nil.

W e s t   F l a t s.

Jos. Johnston & Partners.

285 $\frac{1}{4}$  Days Worked.

|          | L  | W    | S.F.  | S.M.    | H   | C.F.         | C.M.            | )              |
|----------|----|------|-------|---------|-----|--------------|-----------------|----------------|
| No.4 Top | 28 | x 26 | - 728 | - 67.63 | x 6 | - 4368       | - 123.68        | )              |
| " " "    | 32 | x 25 | - 800 | - 74.32 | x 6 | - 4800       | - 135.91        | ) @ Days Wages |
| " " "    | 17 | x 16 | - 272 | - 25.27 | x 6 | - 1632       | - 46.21         | )              |
|          |    |      |       |         |     | <u>10800</u> | <u>- 305.80</u> | )              |

Tonnage to Mill:- 900

Wages Paid: £160:15: 2.

Cost per Cu.M.:- 10s/6d.

N e n t s b u r y   M i n e  
 @@@@  
 @@@@

Development Footage: Nil.

Vein.                      J. Armstrong & Partners.

199 Days. Worked.

|                  | L  | H    | S.F.  | S.M.    | W.   | C.F.        | C.M.            | )              |
|------------------|----|------|-------|---------|------|-------------|-----------------|----------------|
| Liverick- Hdg.   | 11 | x 16 | - 176 | - 16.35 | x 12 | - 2112      | - 59.80         | )              |
| " - Drive.       | 6  | x 7  | - 42  | - 3.90  | x 5  | - 210       | - 5.94          | )              |
| Dupont E. String | 21 | x 4  | - 84  | - 7.80  | x 6  | - 504       | - 14.27         | )              |
| " W. "           | 24 | x 9  | - 216 | - 20.07 | x 6  | - 1296      | - 36.70         | ) @ Days Wages |
| Sincay "         | 18 | x 24 | - 432 | - 40.13 | x 6  | - 2592      | - 73.39         | )              |
|                  |    |      |       |         |      | <u>6714</u> | <u>- 190.10</u> | )              |

Tonnage to Mill: 292

Wages Paid:- £11. 6. 6.

Cost per Cu.M.:- 11/8 $\frac{1}{2}$

MINE STATISTICS *September* 1941.

|           | Tons of Ore Mined. |      |       | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked. |          |           |          | Tons per Miner's Day |          |       | Cubic Metres per Miner's Day |          |       | Per Underground Man |              |       | Wages paid per Miner's Day |       |          | Wages paid per Underground Man |          |       | Wages paid per Cubic Metre |         | No. of Drills Working | Dynamite |     |       |      |
|-----------|--------------------|------|-------|------------------|----------|-------|----------------------|----------|-------|--------------|----------|-----------|----------|----------------------|----------|-------|------------------------------|----------|-------|---------------------|--------------|-------|----------------------------|-------|----------|--------------------------------|----------|-------|----------------------------|---------|-----------------------|----------|-----|-------|------|
|           | Headings.          | Dev. | Total | In Ore           | In Deads | Total | In Ore               | In Deads | Total | Miners       |          | Labourers |          | In Ore               | In Deads | Total | In Ore                       | In Deads | Total | Tons                | Cubic Metres | Total | Headings                   | Total | Headings | Total                          | Headings | Total | lbs.                       | per ton |                       |          |     |       |      |
|           |                    |      |       |                  |          |       |                      |          |       | In Ore       | In Deads | In Ore    | In Deads |                      |          |       |                              |          |       |                     |              |       |                            |       |          |                                |          |       |                            |         |                       |          |     |       |      |
| Nentsbury | 292                | -    | 292   | 190              | -        | 190   | 1.59                 | -        | 1.59  | 199          | -        | 59        | -        | 208                  | -        | 208   | 1.47                         | 1.47     | 0.95  | 0.95                | 1.13         | 0.73  | 1.12                       | -     | 1.12     | 10/2                           | 10/2     | 10/2  | 13/10                      | 13/10   | 9                     | 4        | 331 | 1.13. |      |
| 3-Mos Av  | 282                | -    | 282   | 136              | -        | 136   | 2.20                 | -        | 2.20  | 169          | -        | 49        | -        | 218                  | -        | 218   | 1.67                         | 1.67     | 0.78  | 0.78                | 1.28         | 0.60  | 1.09                       | -     | 1.09     | 10/2                           | 10/2     | 10/2  | 17/2                       | 17/2    | 8                     | 3        | 217 | 0.77  |      |
| 4-Mos Av  | 284                | -    | 284   | 149              | -        | 149   | 1.90                 | -        | 1.90  | 176          | -        | 52        | -        | 228                  | -        | 228   | 1.62                         | 1.62     | 0.83  | 0.82                | 1.34         | 0.63  | 1.01                       | -     | 1.01     | 10/2                           | 10/2     | 10/2  | 15/10                      | 15/10   | 8                     | 4        | 245 | 0.85  |      |
| Rodderup  | 900                | -    | 900   | 306              | -        | 306   | 2.94                 | -        | 2.94  | 285          | -        | 79        | -        | 364                  | -        | 364   | 3.15                         | 3.15     | 1.07  | 1.07                | 2.47         | 0.92  | 1.12                       | -     | 1.12     | 10/9                           | 10/9     | 10/9  | 12/6                       | 12/6    | 4                     | 5        | 791 | 0.89  |      |
| 8-Mos Av  | 786                | -    | 786   | 379              | 3        | 382   | 2.08                 | -        | 2.07  | 349          | 4        | 90        | -        | 443                  | -        | 443   | 2.25                         | 2.23     | 1.08  | 1.07                | 1.74         | 0.86  | 1.07                       | 10/2  | 10/2     | 10/2                           | 9/10     | 9/10  | 9/10                       | 11/6    | 11/6                  | 5        | 6   | 751   | 0.96 |
| 9-Mos Av  | 198                | -    | 198   | 371              | 2        | 373   | 2.17                 | -        | 2.17  | 342          | 3        | 88        | -        | 433                  | -        | 433   | 2.35                         | 2.31     | 1.08  | 1.07                | 1.85         | 0.86  | 1.03                       | 10/2  | 10/2     | 10/2                           | 9/11     | 9/11  | 9/11                       | 11/8    | 11/8                  | 1        | 8   | 755   | 0.95 |

COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱..... Rodderup .....✱

Nentsbury      Tons in Deads      Rodderup      Tons in Deads

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1931.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 447          | 10/-          |
| February  |              |               | 227          | 13/3          |
| March     |              |               | 369          | 4/7           |
| April     |              |               | 485          | 10/7          |
| May       |              |               | 428          | 4/3.          |
| June      | 148          | 15/6          | 397          | 4/7           |
| July      | 76           | 20/10         | 396          | 4/1-          |
| August    | 184          | 15/2          | 301          | 13/7          |
| September | 190          | 13/10         | 306          | 12/6          |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report of Nenthead Mines October 1941

### REPORT OF NENTHEAD MINES OCTOBER 1941.

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u>      | <u>Rodderup.</u> | <u>Totals.</u>        |
|-------------------|-------------------|-----------------------|------------------|-----------------------|
| Ore Mined         | 322 Tons          | Conditions unchanged. | 842 Tons         | 1164 Tons.            |
| Ore Milled        | 322 "             |                       | 842 "            | 1164 "                |
| Lead Concs. prcd. | 22.25 "           |                       | 105.15 "         | 127.40 "              |
| % of Galena       | 6.90%             |                       | 12.42%           | N. R.<br>6.90% 12.42% |
| Hours Worked      | 91.50 hours       |                       | 165.00 hours     | 91.5 165 hours.       |
| Tons per hour     | 3.53 Tons         |                       | 5.10 Tons        | 3.53 5.10 Tons.       |

#### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>            | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|-----------------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.                        | 2500 Tons        | 2500 Tons.     |
| Blende-Witherite | 50 Tons           | Nil.             | 150 Tons<br>(about 28% Zn.) | Nil.             | 200 "          |

Rough Blende:- Nil.  
Fine Blende:- Nil.

Galena at Nentsbury, 34.55 Tons: Potters Ore (5/15mm.) at Nents., 2.50 Tons  
" " Rodderup, 65.602 " : " " " Rodd., 11.00 "

Coal consumed at Rampgill, 2.50 Tons.  
Fuel Oil " " " 0.20 "  
" " " " Nentsbury, 1.10 "  
" " " " Rodderup, 0.25 "

COMPRESSED AIR produced at NENTHEAD from Water Power only, approximated  
550 cu.ft. per minute at a pressure  
of 80lbs. per square inch.

COMPRESSED AIR produced at RODDERUP from Electricity and Water Power  
amounted to approximately 650 to  
700 cu.ft. per minute at 80 to 85 lbs.  
pressure.

## **NENTHEAD MINES OCTOBER 1941**

NENTSBURY MINE. Labour shortage and minor interruptions by Government Engineers instructed to make a report on Nentsbury for the production of Zinc, have kept the output to a low figure. In addition to the Lead Ore produced, 30 Tons of Fluor Spar was produced from dump material brought from Rodderup. The output from the mine was 322 Tons of Lead Ore from which 22.25 Tons of Concentrates were produced\* a percentage recovery of 6.90%. It is probable the Government will take over, and pay, for the miners employed in Nentsbury for two weeks to put X-cuts out on S.1. Vein mainly, and to timber rises to take samples. The Government will also pay the proportion of Standing Charges for two weeks if they decide to use the miners.

MILL. In good order.

RODDERUP MINE. The improvement in the grade of the ore broken in two flats is shewn in the percentage recovered, which is the highest for many years. The tonnage sent to the Mill was 840 Tons from which 105.15 Tons of Concentrates were produced, equalling a recovery of 12.48%. Unfortunately we have no quantity of ore "blocked — out" and consequently we depend daily upon the grade of the ore broken. Owing to shortage of labour, we have no miners available for development. We live from day to day. The mine at present is generally looking well.

MILL. In good order.

SALE OF LEAD ORE. These are made monthly to Messrs. Walkers Parker & Co., Newcastle. Not being able to get steel drums ordered 3 months ago, we have not been able to export for Messrs. Morris Ashby Ltd. Government orders for steel are having priority over all other industrial concerns.

SALE OF GRAVEL ETC. These are held up at present, also by Government decree, according to the information available. We expect to sell when the Government ban is lifted.

GENERAL. The mines are being worked at a small profit, and we are carrying out Government instructions as far as possible in the National interest.

OCTOBER 1941.

Rodderup Mine.  
~~XXXXXXXXXXXX~~ ~~XXXXXXXX~~

Development Footage: Nil.

West Flats.

Jos. Johnston & Partners.

282<sup>1</sup>/<sub>2</sub> Days Worked.

|            | L       | W | S.F. | S.M. | H.        | C.F. | C.M. | )                      |
|------------|---------|---|------|------|-----------|------|------|------------------------|
| No.4 Top   | 29 x 22 | - | 638  | -    | 59.27 x 6 | -    | 3828 | - 108.39 )             |
| " " "      | 25 x 26 | - | 650  | -    | 60.38 x 6 | -    | 3900 | - 110.43 )             |
| " " Side   | 12 x 12 | - | 144  | -    | 13.38 x 6 | -    | 864  | - 24.36 ) @ Days Wages |
| " " Pillar | 13 x 6  | - | 78   | -    | 7.24 x 5  | -    | 390  | - 11.04 )              |
| " " "      | 10 x 6  | - | 60   | -    | 5.57 x 6  | -    | 360  | - 10.19 )              |
|            |         |   |      |      |           |      | 2340 | - 264.41 )             |

Tonnage to Mill:- 842

Wages Paid:- £159: 2: 4.

Cost per Cu.M.:- 12s/0<sup>1</sup>/<sub>2</sub>d.

Nentsbury Mine.  
~~XXXXXXXXXXXX~~ ~~XXXXXXXX~~

J. G. Armstrong & Partners.

202 Days Worked.

Vein.

|                          | L       | H | S.F. | S.M. | W.         | C.F. | C.M. | )                |
|--------------------------|---------|---|------|------|------------|------|------|------------------|
| Liverick N. Hdg.         | 14 x 16 | - | 224  | -    | 20.81 x 10 | -    | 2240 | - 63.42 )        |
| Sney String Stope N.     | 30 x 5  | - | 150  | -    | 13.93 x 6  | -    | 900  | - 25.48 ) @      |
| " " " S.                 | 8 x 26  | - | 208  | -    | 19.32 x 6  | -    | 1248 | - 35.34 ) Days   |
| Liverick String Drive E. | 12 x 7  | - | 84   | -    | 7.80 x 5   | -    | 420  | - 11.89 ) Wages. |
| " " " W.                 | 21 x 7  | - | 147  | -    | 13.66 x 5  | -    | 735  | - 20.81 )        |
| Dupont " Hdg.            | 54 x 5  | - | 270  | -    | 25.08 x 6  | -    | 1620 | - 45.87 )        |
|                          |         |   |      |      |            |      | 7163 | - 202.81 )       |

Tonnage to Mill:- 322

Wages Paid:- £116: 8: 6.

Cost per Cu.M.:- 11s/6d.

MINE STATISTICS *October* 1941.

|           | Tons of Ore Mined. |      |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |       | Days Worked. |         |        | Tons per Miner's Day |        |         | Cubic Metres per Miner's Day |         |       | Per Underground Man |         |       | Wages paid per Miner's Day |              |       | Wages paid per Underground Man |       |          | Wages paid per Cubic Metre |          |       | No. of Drills Working |         |        | Dynamite |       |
|-----------|--------------------|------|-------|------------------|---------|-------|----------------------|---------|-------|--------------|---------|--------|----------------------|--------|---------|------------------------------|---------|-------|---------------------|---------|-------|----------------------------|--------------|-------|--------------------------------|-------|----------|----------------------------|----------|-------|-----------------------|---------|--------|----------|-------|
|           | Headings.          | Dev. | Total | In Ore           | In Dead | Total | In Ore               | In Dead | Total | Miners       |         |        | Labourers            |        |         | In Ore                       | In Dead | Total | In Ore              | In Dead | Total | Tons                       | Cubic Metres | Total | Headings                       | Total | Headings | Total                      | Headings | Total | No.                   | per ton |        |          |       |
|           |                    |      |       |                  |         |       |                      |         |       | In Ore       | In Dead | In Ore | In Dead              | In Ore | In Dead |                              |         |       |                     |         |       |                            |              |       |                                |       |          |                            |          |       |                       |         | In Ore | In Dead  | Total |
| Nentsbury | 322                | -    | 320   | 203              | -       | 203   | 158                  | -       | 158   | 202          | -       | 62     | -                    | 264    | -       | 154                          | -       | 154   | 100                 | -       | 100   | 1.22                       | 0.77         | 143   | 10/11                          | -     | 11/6     | 10/11                      | 10/11    | 143   | 14/3                  | 178     | 4      | 260      | 0.80  |
| 4 Mos Av  | 284                | -    | 284   | 149              | -       | 149   | 140                  | -       | 140   | 176          | -       | 52     | -                    | 228    | -       | 162                          | -       | 162   | 0.82                | -       | 0.82  | 1.24                       | 0.63         | 10/11 | 10/9                           | -     | 10/11    | 10/9                       | 16/10    | 16/10 | 8/3                   | 4       | 265    | 0.85     |       |
| 6 Mos Av  | 292                | -    | 292   | 160              | -       | 160   | 154                  | -       | 154   | 181          | -       | 84     | -                    | 235    | -       | 160                          | -       | 160   | 0.86                | -       | 0.86  | 1.24                       | 0.66         | 11/1  | 10/4                           | -     | 11/1     | 10/4                       | 16/4     | 16/4  | 8/4                   | 4       | 248    | 0.85     |       |
| Rodderup  | 842                | -    | 842   | 264              | -       | 264   | 321                  | -       | 321   | 283          | -       | 71     | -                    | 354    | -       | 297                          | -       | 297   | 0.93                | -       | 0.93  | 2.38                       | 0.78         | 11/3  | 10/10                          | -     | 11/3     | 10/10                      | 147      | 147   | 48                    | 5       | 741    | 0.88     |       |
| 9 Mos Av  | 798                | -    | 798   | 311              | -       | 311   | 373                  | -       | 373   | 342          | -       | 88     | -                    | 433    | -       | 233                          | -       | 233   | 1.08                | -       | 1.08  | 1.85                       | 0.86         | 10/35 | 9/11                           | -     | 10/35    | 9/11                       | 11/8     | 11/8  | 5/5                   | 6       | 755    | 0.95     |       |
| 10 Mos Av | 802                | -    | 802   | 361              | -       | 361   | 425                  | -       | 425   | 336          | -       | 86     | -                    | 425    | -       | 239                          | -       | 239   | 1.07                | -       | 1.06  | 1.90                       | 0.85         | 10/5  | 10/1                           | -     | 10/5     | 10/1                       | 11/11    | 11/11 | 574                   | 5       | 764    | 0.94     |       |

COMPARATIVE STATEMENT.

\* Nentsbury ..... \* Rodderup .....

Nentsbury ..... Tons in Dead  
Rodderup ..... Tons in Dead

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

|            |  |  |
|------------|--|--|
| Nentsbury  |  |  |
| ..Mos. Av. |  |  |
| ..Mos. Av. |  |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 447          | 10/1          |              |               |
| February  | 227          | 13/3          |              |               |
| March     | 369          | 11/7          |              |               |
| April     | 485          | 10/7          |              |               |
| May       | 428          | 11/3          |              |               |
| June      | 397          | 11/7          |              |               |
| July      | 76           | 20/10         | 396          | 11/1          |
| August    | 184          | 15/2          | 301          | 13/7          |
| September | 190          | 19/10         | 306          | 12/6          |
| October   | 203          | 14/3          | 264          | 14/7          |
| November  |              |               |              |               |
| December  |              |               |              |               |

# Report of Nenthead Mines November 1941

## REPORT OF THE NENTHEAD MINES

NOVEMBER 1941.

|                   | Nentsbury.                | Rampgill.            | Rodderup. | Totals.        |
|-------------------|---------------------------|----------------------|-----------|----------------|
| Ore Mined         | 125 Tons                  | Conditions unchanged | 801 Tons  | 926 Tons       |
| Ore Milled        | 125 " plus 232 equals 357 | x                    | 801 "     | 1158 "         |
| Lead Concs. prcd. | 8.25 Tons                 |                      | 96.69 "   | 104.94 "       |
| % of Galena       | 6.6%                      |                      | 12.07%    | 6.6% 12.07%    |
| Hours Worked      | 115 hours                 | x                    | 158 hours | 115 158 hours. |
| Tons per hour     | 3.1 Tons                  |                      | 5.06 Tons | 3.1 5.06 Tons  |

x  
Note: In addition to the 125 Tons of Mine Ore milled, 232 Tons of Fluor Spar Ore was crushed. Total ore milled 125 Lead Ore plus 232 Tons Fluor Spar Ore equals 357, divided by 115 hours equals 3.1 Tons. From the Fluor Spar Ore, 64 Tons of saleable Spar was produced.

### STOCKS.

|                  | Nentsbury | Rampgill | Rodderup          | Wellhope | Totals.   |
|------------------|-----------|----------|-------------------|----------|-----------|
| Crude Ore        | Nil       | Nil      | <del>XXXXXX</del> | 2500     | 2500 Tons |
| Blende Witherite | 50 Tons   | Nil      | 150 Tons          | Nil      | 150 "     |
|                  |           |          | (about 28% Zn.)   |          |           |

Rough Blende: Nil.  
 Fine Blende: Nil.

Galena at Nentsbury, 24.34 Tons; Potters Ore at Nentsbury, 2.50 Tons  
 " " Rodderup, 71.152 " ; " " Rodderup, 18.00 "

~~XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX~~  
~~XXXXXXXXXXXXXXXXXX~~

COAL consumed at Rampgill, 2.50 Tons  
 FUEL OIL " " " , 0.20 "  
 " " " " Nentsbury, 1.05 "  
 " " " " Rodderup, 0.25 "

COMPRESSED AIR produced at Nenthead from Water Power only approximated 550 cu.ft. per min. at a pressure at a pressure of 90-lbs Nenthead and 80-lbs at face.

COMPRESSED AIR produced at Rodderup from Electricity and Water Power amounted to 650 to 700 cu.ft per min. at 80 to 85-lbs pressure at the face.

## **NENTHEAD MINES NOVEMBER 1941**

NENTSBURY MINE. As indicated in last month's report Government, through the Non-Ferrous Ores Committee, took over the miners for two weeks to carry out certain work in the mine in which they were interested. For the use of the Foreman, miners, and power etc. etc., the Government paid us in advance the sum of £250. The mill was operated during the time the miners were working for the Government, crushing and dressing Fluor Spar from Rodderup dumps. The output of saleable Fluor Spar produced was 64 Tons. Lead Concentrates produced equals 8.25 Tons.

The nett value of the Fluor Spar was £81., Lead Ore £132, plus Government £250 for the two weeks, enabled us to meet all costs.

MILL. In good repair.

RODDERUP MINE. The grade of the ore remained good, although not quite as good as during October. There is a slight falling off in grade, particularly in two Flats. The general outlook is fair.

Tonnage sent to the Mill for November amounted to 801 Tons compared with 840 Tons in October. Concentrates produced in November 96.69 Tons compared with 105.15 Tons in October, and the percentage 12.07 compared with 12.42.

It must be noted that November was a short month, 24 working days only against 27 in October. Labour difficulty is acute and wages continue to rise.

MILL. In good repair.

SALES OF LEAD ORE. Carried out monthly and accounts paid promptly.

SALES OF GRAVEL. Sales of Gravel and Stones were renewed during the month.

SALE OF FLUOR SPAR. We have disposed of all we have so far produced and can sell as much as we can produce. The Mill at Nentsbury is used for this purpose when short of Lead Ore or for any other cause. The price obtained at Alston Station is 28s/6d per ton.

GENERAL. Conditions generally are unchanged. The average monthly profit will probably work out at £250, which considering the prevailing conditions of high cost, shortage of labour, increased cost of labour and other difficulties is not unsatisfactory.



NOVEMBER 1941.  
 @@@@@@@@@@@@@@ @@@@@@

Rodderup Mine.  
 @@@@@@@@@@@@@@ @@@@@@

Development Footage: Nil.

West Flats.

J. Johnston & Partners. 265 Days Worked.

|            | L  | W     | S.F.   | S.M.    | H.  | C.F.   | C.M.     |          |
|------------|----|-------|--------|---------|-----|--------|----------|----------|
| No.4 Top   | 24 | x 27  | - 648  | - 60.20 | x 6 | - 3888 | - 110.09 | )        |
| " " "      | 29 | x 22½ | * 652½ | - 60.62 | x 6 | - 3915 | - 110.85 | ) @ Days |
| " "Side    | 6  | x 9   | - 54   | - 5.01  | x 6 | - 324  | - 9.17   | ) Wages  |
| " " Pillar | 10 | x 9   | - 90   | - 8.36  | x 6 | - 540  | - 15.29  | )        |
|            |    |       |        |         |     | 8667   | - 245.40 | )        |

Tonnage to Mill:- 801

Wages Paid: £156: 5: 0.

Cost per Cu.M.:- 12s/9d.

Nentsbury Mine.  
 @@@@@@@@@@@@@@ @@@@@@

J. G. Armstrong & Partners 97 Days Worked.

Vein.

|               | L  | H    | S.F.  | S.M.    | W   | C.F.  | C.M.    |                |
|---------------|----|------|-------|---------|-----|-------|---------|----------------|
| Dupont String | 11 | x 7  | - 77  | - 7.15  | x 6 | - 462 | - 13.08 | )              |
| Liverick " E. | 3  | x 7  | - 21  | - 1.95  | x 5 | - 105 | - 2.97  | )              |
| " " W.        | 9  | x 7  | - 63  | - 5.85  | x 5 | - 315 | - 6.92  | ) @ Days Wages |
| Sincay " S½   | 10 | x 6  | - 60  | - 5.57  | x 6 | - 360 | - 10.19 | )              |
| " " N.        | 5  | x 26 | - 130 | - 12.08 | x 6 | - 780 | - 22.09 | )              |
|               |    |      |       |         |     | 2022  | - 57.25 | )              |

Tonnage to Mill:- 125

Wages Paid: £57: 2: 6.

Cost per Cu.M.:- 19/11.

| MINE STATISTICS    |      |       |        |                  |       |        |         |                      |         |       |      |              |       | Nautilus  |        |       |        |                      |      |              |          |                              |       |          |       |                     |       | 1944.    |       |                            |         |  |  |                                |  |  |  |                            |  |  |  |                       |  |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------|------|-------|--------|------------------|-------|--------|---------|----------------------|---------|-------|------|--------------|-------|-----------|--------|-------|--------|----------------------|------|--------------|----------|------------------------------|-------|----------|-------|---------------------|-------|----------|-------|----------------------------|---------|--|--|--------------------------------|--|--|--|----------------------------|--|--|--|-----------------------|--|----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Tons of Ore Mined. |      |       |        | Cubic Metres Cut |       |        |         | Tons per Cubic Metre |         |       |      | Days Worked. |       |           |        |       |        | Tons per Miner's Day |      |              |          | Cubic Metres per Miner's Day |       |          |       | Per Underground Man |       |          |       | Wages paid per Miner's Day |         |  |  | Wages paid per Underground Man |  |  |  | Wages paid per Cubic Metre |  |  |  | No. of Drills Working |  | Dynamite |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |         |                      |         |       |      | Miners       |       | Labourers |        |       |        |                      |      |              |          |                              |       |          |       |                     |       |          |       |                            |         |  |  |                                |  |  |  |                            |  |  |  |                       |  |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Headings.          | Dev. | Total | In Ore | In Dead          | Total | In Ore | In Dead | In Ore               | In Dead | Total | Bar. | Wages        | gains | Total     | In Ore | Total | In Ore | Total                | Tons | Cubic Metres | Headings | Dev.                         | Total | Headings | Total | Headings            | Total | Headings | Total | lbs.                       | per ton |  |  |                                |  |  |  |                            |  |  |  |                       |  |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |         |                      |         |       |      |              |       |           |        |       |        |                      |      |              |          |                              |       |          |       |                     |       |          |       |                            |         |  |  |                                |  |  |  |                            |  |  |  |                       |  |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

# COMPARATIVE STATEMENT.

..... Nentsbury ..... Rodderup .....

Nentsbury ..... Tons in Dead .....  
 Rodderup ..... Tons in Dead .....

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

(Nentsbury

|             |  |
|-------------|--|
| .. Mos. Av. |  |
| .. Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 447          | 10/-          |
| February  |              |               | 227          | 13/3          |
| March     |              |               | 369          | 11/7          |
| April     |              |               | 485          | 10/7          |
| May       |              |               | 428          | 11/3          |
| June      | 148          | 15/6          | 397          | 11/7          |
| July      | 76           | 20/10         | 396          | 11/-          |
| August    | 184          | 15/2          | 301          | 13/7          |
| September | 190          | 13/10         | 306          | 12/6          |
| October   | 203          | 14/3          | 264          | 14/7          |
| November  | 57           | 25/1          | 245          | 14/6          |
| December  |              |               |              |               |



## **NENTHEAD MINES DECEMBER 1941**

NENTSBURY MINE. The Lead Ore from Nentsbury was lower in Lead content during December than for some time past. This was caused by two of the three working places, viz: driving in the bottom of the Limestone on a branch bearing N.W. and running parallel to Sincay N. of Treloar Vein, and driving South on the branch parallel to Liverick Vein, necessitating the driving of forebreasts to open up the branches in the bottom of the Limestone and to be accessible to the main tramming level. Both these places will yield ore of a higher grade within a month or two, and may continue doing so for many months. The percentage recovery will improve as more of the better quality ore in the roof is broken.

MILL. In good repair

RODDERUP MINE. The recovery value of the ore mined dropped from 12.07% to 10.83%. The cause of the fall was lower grade ore broken in two Flats previously yielding rich ore, and which have been affected by the intrusion of a fault. The ore of the West side of the fault is still about 10% and possibly and very probably will improve as the Flat gets further from the fault. I do not anticipate a spectacular fall or rise in grade for a few weeks. Like most mines in England we are suffering from shortage of efficient labour. We are unable to do anything about it because of the War.

MILL. In good condition.

SALES OF LEAD ORE. Up to the end of the year we sold all our output and stock except for 6 Tons odd, to our usual buyers, and the greatest part of it has been paid for. The balance outstanding was only despatched during the last week of December.

SALE OF GRAVEL & STONE. These have improved during December and our stocks are now very small.

SALE OF FLUOR SPAR. In all during the past 4 months, we have sold 171 Tons 17 cwt 2 quarters, of Fluor Spar at a price of 28/6 per ton f.o.r. Alston Station. From Jan. 1st 1942, the price will be 32s/- per ton f.o.r. Alston Station. The profit is about 10s/- per ton.

GENERAL. At the end of 1941, the outlook for 1942 is quite as encouraging as at the end of 1940. I anticipate the year's profit will amount to at least £4000.

DECEMBER 1942  
 0000000000000000 00000000

Rodderup Mine.  
 0000000000000000 00000000

Development Footage: Nil

West Flats.

Jos. Johnston & Partners

214½ Days Worked.

|            | L  | W    | S.F.  | S.M.    | H   | C.F.   | C.M.     | )              |
|------------|----|------|-------|---------|-----|--------|----------|----------------|
| No.4 Top   | 33 | x 25 | - 825 | - 76.64 | x 6 | - 4950 | - 140.16 | )              |
| " " "      | 26 | x 18 | - 468 | - 43.48 | x 6 | - 2808 | - 79.51  | ) @ Days Wages |
| " " Pillar | 9  | x 9  | - 81  | - 7.52  | x 6 | - 486  | - 13.76  | )              |
|            |    |      |       |         |     | 8244   | - 233.43 | )              |

Tonnage to Mill: 810

Wages Paid: £124: 14: 9.

Cost per Cu.M.: - 10s/7d.

Nentsbury Mine.  
 0000000000000000 00000000

Development Footage: Nil

J. Armstrong & Partners.

197 Days Worked.

| <u>Vein.</u>    | L  | H    | S.F.  | S.M.    | W.  | C.F.   | C.M.     | )              |
|-----------------|----|------|-------|---------|-----|--------|----------|----------------|
| Liverick String | 25 | x 15 | - 375 | - 34.84 | x 6 | - 2250 | - 63.71  | )              |
| Sincay "        | 18 | x 12 | - 216 | - 20.07 | x 6 | - 1296 | - 36.70  | )              |
| " Stope         | 16 | x 12 | - 192 | - 17.84 | x 6 | - 1152 | - 32.62  | ) @ Days Wages |
| " " N.          | 15 | x 8  | - 120 | - 11.15 | x 6 | - 720  | - 20.38  | )              |
|                 |    |      |       |         |     | 5418   | - 153.41 | )              |

Tonnage to Mill: 392

Wages Paid: £110: -: 7.

Cost per Cu.M.: - 14s/4d.

# MINE STATISTICS.....*December*.....1941.

|  | Tons of Ore Mined. |  |            |  | Cubic Metres Cut |  |          |  | Tons per Cubic Metre |  |        |  | Days Worked. |  |       |  |                 |  |        |  |          |  | Tons per Miner's Day | Cubic Metres per Miner's Day |  |        |  | Wages paid per Miner's Day |  |       |  | Wages paid per Underground Man |  |                |  | Wages paid per Cubic Metre |  | No. of Drills Working | Dynamite     |  |        |  |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--------------------|--|------------|--|------------------|--|----------|--|----------------------|--|--------|--|--------------|--|-------|--|-----------------|--|--------|--|----------|--|----------------------|------------------------------|--|--------|--|----------------------------|--|-------|--|--------------------------------|--|----------------|--|----------------------------|--|-----------------------|--------------|--|--------|--|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  | Headings.          |  | Dev. Total |  | In Ore           |  | In Deads |  | Total                |  | In Ore |  | In Deads     |  | Total |  | Bar- Wages gins |  | In Ore |  | In Deads |  |                      | Total                        |  | In Ore |  | In Deads                   |  | Total |  | Headings Dev. Total            |  | Headings Total |  | Total                      |  |                       | lbs. per ton |  |        |  |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                    |  |            |  |                  |  |          |  |                      |  |        |  |              |  |       |  |                 |  |        |  |          |  |                      |                              |  |        |  |                            |  |       |  |                                |  |                |  |                            |  |                       |              |  | Miners |  | Labourers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                    |  |            |  |                  |  |          |  |                      |  |        |  |              |  |       |  |                 |  |        |  |          |  |                      |                              |  |        |  |                            |  |       |  |                                |  |                |  |                            |  |                       |              |  |        |  |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱..... Rodderup .....✱

Nentsbury ..... Tons in Deaths .....  
Rodderup ..... Tons in Deaths .....

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1931.

[Nentsbury

|              |  |
|--------------|--|
| ... Mos. Av. |  |
| ... Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 447          | 10/-          |
| February  |              |               | 227          | 13/3          |
| March     |              |               | 369          | 11/7          |
| April     |              |               | 485          | 10/7          |
| May       |              |               | 428          | 11/3          |
| June      | 148          | 15/6          | 397          | 11/7          |
| July      | 76           | 20/10         | 396          | 11/-          |
| August    | 184          | 15/2          | 301          | 13/7          |
| September | 190          | 13/10         | 506          | 12/6          |
| October   | 203          | 14/3          | 264          | 14/7          |
| November  | 57           | 25/1          | 245          | 14/6          |
| December  | 153          | 19/3          | 233          | 13/8          |

**ANNUAL REPORT  
Of the  
NENTHEAD MINES  
1941**

NENTSBURY MINE. Nentsbury Mine was on a maintenance basis until May 19<sup>th</sup> 1941. The miners when not in the mine were employed repairing the main 12' pipe-line from Perry Dam to Middlecleugh. New pipes were installed where the old pipes were beyond repair. In addition, new 6' pipes were installed in the 6" pipe-line carrying Compressed Air to Wellhope, where the old pipes were beyond repair. Work was impeded by the worst snow-storm for many years, during which, from the end of December 1940 to the end of March 1941, all communications, with the country generally were cut off, and for four weeks even between Alston and Nenthead. Telegraph and telephone wires were blown down and the roads for the greater part of the time were completely blocked with snow.

On May 19<sup>th</sup> work was commenced in Nentsbury Mine on a small scale, and from that date to December 31<sup>st</sup> 1978 Tons of Lead Ore was broken, from which 153.05 Tons of Concentrates were produced. The percentage recovery was 7.737%

Owing to shortage of labour it was not possible to carry out any development on a planned scale, but such mining as was done could justifiably be regarded as development.

The ore broken was from parallel branches or small veins running parallel to Liverlck Vein South of S.2. on the E. Side. and on a parallel string or small vein on the West side of Sincay North. This latter string is bearing North West and if it continues to yield ore it should yield a useful tonnage especially when the scale of operations is limited to the present output.

ORE RESERVES. The Ore Reserves at the end of the year (Dec. 31st 191941) can be regarded as approximately the same as at the end of 1940, viz: 76633 Tons, of which, Blende-Witherite-Lead Ore amounted to 73671 Tons, and Lead Ore 2962 Tons. The small tonnage taken from the Lead Ore Reserves has, I consider, been made up by the Lead Ore Reserve opened up on the two branches or small veins referred to. It will be appreciated that it is not possible to give a close estimate of the values of the ore likely to be found in the branches, because insufficient work has been done to open out on the branches to any extent. I expect the values to be maintained at from 7 to 8% Galena.

GENERAL.

In the Annual Report for 1940, I referred to the reports made by Government officials during that year. Nothing eventuated from these. In May 1941, Dr. Dunham was again sent to go carefully into the Zinc values, and later he was Joined by the Consulting Engineer to the Non-Ferrous Ores Committee, Mr. Jackson. During the latter part of the year, and up to Dec. 31st, Mr. Jackson, with two assistants sampled the Zinc-Witherite Ore Reserves, taking several samples, and in November, arranged with me to have the use of our miners in

Nentsbury Mine, the mine foreman, and equipment, to carry out some exploratory work to ascertain the width of S.1 Vein E. For the use of the miners, tools. Compressed Air, explosives etc. etc., the Non-Ferrous Ores Committee paid the Company £250 (Two Hundred and Fifty Pounds) for the fortnight they had the men borrowed. No report on what has been done has yet been presented.

I have written the committee several times pointing out that the frequent inspections are both hampering our work and preventing me making any definite plans. They also prevent me selling any part of Rampgill Plant, or working it if labour could be found to produce Fluor Spar from which there is a great demand at remunerative prices. Acting for the Government, the Committee, in conjunction with the Controller of Non-Ferrous Ores, is all powerful and all I can do is to call attention to the circumstances. Towards the end of 1941, the Committee obtained permission, and sent a formula for the value of the Zinc Ore Residues from the Zinc-Witherite Middlings lying at Messrs. Athole G. Allen's works, Stockton-on-Tees, for the Witherite content of which Messrs. Allan have already paid, (in 1939 when the last parcel was delivered). It now seems probable that the Zinc Ore - the property of the V. M. Co., - will be separated and sold during 1942. The value of the Zinc residues was not included in the accounts for 1939, because it was not possible to assess a value. Consequently the best adjustments possible will have to be made at the end of 1942, if the Zinc Residues is disposed of.

Nentsbury Mill has been maintained in good condition and has yielded satisfactory results. During the year 174 Tons (approx.) of Fluor Spar has been produced from about 400 Tons of dump ores from Rodderup Fell Middle Level dump and Firestone dump Nenthead.

#### OUTLOOK FOR 1942

The outlook for Nentsbury, is, I consider, more encouraging than in January 1941. Both the mine and Mill are in daily operation on a limited scale, and if the Government allow us to retain the present number of employees, the year's output of Lead Ore should be much above the output for 1941. It is also possible that Witherite may be produced at a profit. Mining results will depend entirely upon the amount of labour we can retain. That is entirely beyond our control.

RODDERUP MINE. During 1941, 9728 Tons of Ore were mined in Rodderup and crushed in the Mill. Concentrates produced amounted to 1010.69 Tons, equal to a recovery of 10.39%. At the end of the year the stock of concentrates at Rodderup & Nentsbury amounted to 6.428 Tons. The stock of concentrates on December 31st 1940, was 15.495 Tons, which with 1010.69 Tons from Rodderup and 153.05 Tons from Nentsbury during 1941 amounted to 1172.867 Tons. The book stock is 6.363 Tons which gives a difference of 0.065 Tons compared with the actual stock.

The ore mined during the year was from the Flats on the North side of Rodderup Fell Vein. The richest ore was found during 1941, as during 1940, on the North side of a fault. During Sept., Oct. and Nov., the ore in two Flats was exceptionally good, but a small fissure which crossed the Flats at the end of Nov., displaced the strata, and the ore on the West side was not as rich. In all



probability the ore will improve again when the face of the Flat is driven several fathoms West of the fault.

Wages, which increased during 1940, increased still further during 1941, and the rate of Income Tax, increased to 7s/6d early in 1940 and later to 8s/6d, was increased to 10s/- in the £. In April of 1941. Employers are compelled by law to deduct Income Tax from the earnings of all officials and employees liable for Tax, and pay the Tax deducted direct to the Collector of Taxes. Wages are now more than 50% higher than in 1939. This and the higher cost of materials, have increased the cost per ton of ore treated.

DEVELOPMENT. Owing to shortage of labour it has not been possible to carry out any development and maintain the Mill with sufficient ore to run one short shift only.

ORE RESERVES. At the end of 1941 it might be wise to deduct the tonnage mined, from the 100,000 Tons given as the approximate quantity in reserve at the end of 1940. For this reason, the reserves can be considered as 100,000 - 9728, equals 90,272 Tons.

No Ore Reserves have been calculated W. of the West X-course. In all probability there is substantial tonnage there. We know that a block W. of the cross-course contains payable ore at present prices.

PRICE OF LEAD. There has been no change in the price of Lead during the year. We have however been able to sell fully 30% of our output as Potters Lead Ore for export, at a price which, after allowing for extra Railway freight, cost of drums, etc., yields a nett price above that paid by Messrs. Walker Parker & Co. who take our bulk ore.

The ore sold for export is of a higher grade than the bulk ore which varies between 80.5 and 82.5% Pb. Owing to increased Returning Charges, the Lead Ore Sold to Messrs. Walkers Parker & Co. yields a nett price of approximately £15. Per ton. Ore sold for export yields approximately £20 per ton nett, after transport and cost of drums, shipping and other expenses are met.

SALES OF STONE & GRAVEL. During the year 13800 Tons of stones & Gravel were sold, of which about 50% were stones. The nett price of the gravel was 3s/6d per ton to 4s/6d per ton at the heap, and for stones 1s/4½d per ton after allowing 1½d per ton commission.

GENERAL REMARKS. The declared profit for the year ended Dec. 31st 1940, as shown in the Balance Sheet prepared by Messrs. Greaves & Co., of 1 St. Nicholas Buildings, Newcastle-on-Tyne and elsewhere was, £4855. 4. 10., and this sum was carried to capital account. I estimate a profit of over £4000 for 1941.

The Staff, excepting G. Beresford, and the mine and mill foremen, have had no increase of salary since war was declared, except that I restored my salary to what it was previous to the arrangement made in May 1939 with the General Manager, on the ground that when both Mines were working and yielding a profit I was entitled to the salary I previously had. In view of this, and the fact that all officials in neighbouring mines, were paid increased salaries, I agreed to

pay a special war bonus equal to 10% of the salary, and in addition to the ordinary bonus previously paid by the Company. Considering the high rate of Income Tax, the increased cost of living, and that no member of the Staff has had a holiday for three years - I have not had a holiday since October 1937 - I do not consider the Special Bonus unreasonable.

OUTLOOK FOR 1942 Naturally the results for 1942 must depend upon the Government, and whether or not they consider directly interesting themselves in Nentsbury for Zinc. If allowed to work and presuming we can retain the present number of employees, the results for 1942 should be similar, or even slightly better, to those for 1941. Nentsbury should yield a better output, probably nearer 250 Tons of lead during 1942 than 195 Tons produced during 1941, and possibly an output of Witherite ore.

Again I wish to place on record the whole-hearted and willing assistance rendered by all members of the Company's staff, under often difficult and trying conditions. The Co.'s property was intact up to Dec. 31<sup>st</sup> 1941, and the Bank Cash position was sound. Neither was there any liabilities except running monthly accounts. It is y utmost endeavour to do all that is possible to keep the Co.'s position secure and its finances sound.

# Report of Nenthead Mines January 1942

## REPORT OF NENTHEAD MINES

JANUARY 1942.

|                        | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|------------------------|-------------------|------------------|------------------|----------------|
| <u>Ore Mined</u>       |                   |                  |                  |                |
| Witherite              | 77 Tons           | Conditions       | )                |                |
| Lead Ore               | 273 "             | unchanged.       | 710 Tons )       | 1060 Tons      |
|                        | 350 "             |                  |                  |                |
| Ore Milled             | 350 "             |                  | 710 "            | 1060 "         |
| <u>Concs. Produced</u> |                   |                  |                  |                |
| Witherite              | 23.00 Tons        |                  |                  | 23.00 "        |
| Lead Ore               | 14.60 "           |                  | 75.75 Tons       | 90.35 "        |
|                        |                   |                  | N. R.            |                |
| % of Witherite         | 31.90%            |                  | -                | 31.90%         |
| % of Galena            | 5.34%             |                  | 10.67%           | 5.34% 10.67%   |
| Hours worked           | 90.00 Hours       |                  | 142 hours        | 90 142 hours   |
| Tons per hour          | 3.88 Tons         |                  | 5.00 Tons        | 3.88 5.00 Tons |

FLUOR SPAR produced and sold from Rodderup Mine: 37 Tons.  
The price per ton received was 29/9d. per ton  
nett at Alston Station.

### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende Witherite | 50 Tons           | Nil.             | 150 Tons         | Nil.             | 200 "          |
|                  |                   |                  | (about 28% Zn.)  |                  |                |

Galena at Nentsbury, 18.44 Tons: Potters Ore at Nentsbury, 1.50 Tons  
" " Rodderup, 52.538 " : " " Rodderup, 24.20 "

|          |                       |           |
|----------|-----------------------|-----------|
| COAL     | consumed at Rampgill, | 3.00 Tons |
| FUEL OIL | " " "                 | 0.25 "    |
| " "      | " Nentsbury,          | 1.75 "    |
| " "      | " Rodderup,           | 0.20 "    |

COMPRESSED AIR produced at NENTHEAD from Water Power only has varied from 300 to 500 cu.ft. per min. and the pressure has also varied, from 60 to 85 lbs. The quantity and pressure were low owing to the water-courses being filled with snow & ice.

COMPRESSED AIR produced at RODDERUP from Electricity and Water Power amounted to 600 to 700 cu.ft. per minute at a pressure of 80 to 85 lbs. per square inch at the face.

## **NENTHEAD MINES**

### **JANUARY 1942**

NENTSBURY MINE. Mine results were affected by low air pressure for drilling caused by a heavy snowstorm and frozen pipes. The quantity of ore milled amounted to 350 Tons consisting of 77 Tons of Witherite and 275 Tons of Lead Ore. The Witherite Ore was broken from "T" Vein, East of Liverick Vein, and the Lead Ore from parallel strings East of Liverick South of S.2 Vein, and West of Sincay North and a string parallel to S.2 Vein. The object for milling some Witherite ore was to ascertain what percentage of concentrates could be produced, and when produced, whether saleable. When the roads out of Nenthead are open, the question of the sale of Witherite Concentrates will be raised. Witherite is now commanding a high price.

MILL. In good order.

RODDERUP MINE. The quantity of ore mined and milled was lower than for some time because of blocked water-courses and frozen pipes. The quantity crushed was 710 Tons with 75.75 Tons of Concentrates recovered, equal to 10.67%. Owing to a fault crossing the flats the high grade ore has been temporarily cut out and to get a grade of 10.67% more picking in the mine was done, which accounts for a lower tonnage milled and a lower output. We are driving forward West through the fault which is at least 4 feet wide and strong in character, to prove what has happened on the W. side. In the meantime, we have brought some of the miners to a Flat nearer the incline where some payable ore was left in reserve.

SALE OF POTTERS ORE. We have sold just over 40 Tons of 3/5 mm ore to the Pyros White Lead Co., London, for £19. 10s. 0d per ton delivered Alston Station, less 10s/- per ton commission to F. J. Ryland, the buyer for this Company, and have arranged to sell 30 Tons approx. of 1/3 mm. and 3/5 mm. sizes per month at the above price as long as the Government price for Lead is fixed at £25. 0. 0. per ton.

SALE OF STONE & GRAVEL. Owing to the weather all sales were suspended.

SALE OF FLUOR SPAR. During the month 37 Tons of Fluor Spar were mined and sold from Rodderup. The price was 32s/- per ton F.O.R. Alston, or 29s/9d per ton nett, less 1s/- per ton Royalty.

GENERAL REMARKS. The labour position is still acute. Miners cannot be obtained except by Government consent, and through the local Labour Exchange. The weather during January was very bad, all roads were blocked for days and after 3 weeks some are still blocked. We are doing everything possible with the limited number of people employed.

R o d d e r u p   M i n e  
 ~~~~~

Development Footage: Nil.

W e s t   F l a t s

J. Johnston & Partners.

235½ Days Worked.

	L	W	S.F.	S.M.	H.	C.F.	C.M.	)
No.4 Flat - Top	30	x 22	- 660	- 61.31	x 6	- 3960	- 112.13	)
" " " - "	25	x 22	- 550	- 51.09	x 6	- 3300	- 93.44	) @ Days
" " " - Side	10	x 14	- 140	- 13.01	x 6	- 840	- 23.78	) Wages.
" " " - Pillar	5	x 6	- 30	- 2.79	x 6	- 180	- 5.10	)
						<u>8280</u>	- <u>234.45</u>	)

Tonnage to Mills: 710

Wages Paid:- £133: 14: 6.

Cost per Cu.M.: - 11s/5d.

N e n t s b u r y   M i n e.  
 ~~~~~

Development Footage: Nil.

J. Armstrong & Partners.

154 Days Worked.

Vein.

|                | L  | H    | S.F.  | S.M.    | W.  | C.F.        | C.M.            | )              |
|----------------|----|------|-------|---------|-----|-------------|-----------------|----------------|
| Sincay String. | 27 | x 12 | - 324 | - 30.10 | x 6 | - 1944      | - 55.04         | )              |
| Liverick "     | 38 | x 8  | - 304 | - 28.24 | x 6 | - 1824      | - 51.67         | ) @ Days Wages |
|                |    |      |       |         |     | <u>3768</u> | - <u>106.69</u> | )              |

Tonnage to Mill:- 350

Wages Paid:- £90: 7: 11.

Cost per Cu.M.: - 16s/11d.

# MINE STATISTICS

January

1942.

|           | Tons of Ore Mined. |      |       | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked. |          |           |        |          |       | Tons per Miner's Day |          |       | Cubic Metres per Miner's Day |          |       | Wages paid per Miner's Day |          |       | Wages paid per Underground Man |          |       | Wages paid per Cubic Metre |       |      | No. of Drills Working |   | Dynamite |      |
|-----------|--------------------|------|-------|------------------|----------|-------|----------------------|----------|-------|--------------|----------|-----------|--------|----------|-------|----------------------|----------|-------|------------------------------|----------|-------|----------------------------|----------|-------|--------------------------------|----------|-------|----------------------------|-------|------|-----------------------|---|----------|------|
|           |                    |      |       |                  |          |       |                      |          |       | Miners       |          | Labourers |        | Bar.     |       |                      |          |       |                              |          |       |                            |          |       |                                |          |       |                            |       |      |                       |   |          |      |
|           | Headings.          | Dev. | Total | In Ore           | In Deads | Total | In Ore               | In Deads | Total | In Ore       | In Deads | Total     | In Ore | In Deads | Total | In Ore               | In Deads | Total | In Ore                       | In Deads | Total | In Ore                     | In Deads | Total | In Ore                         | In Deads | Total | Headings                   | Total | lbs. | per ton               |   |          |      |
|           |                    |      |       |                  |          |       |                      |          |       |              |          |           |        |          |       |                      |          |       |                              |          |       |                            |          |       |                                |          |       |                            |       |      |                       |   |          |      |
| Nentsbury |                    |      |       |                  |          |       |                      |          |       |              |          |           |        |          |       |                      |          |       |                              |          |       |                            |          |       |                                |          |       |                            |       |      |                       |   |          |      |
| 1. Mos Av | 350                | -    | 350   | 107              | -        | 107   | 327                  | -        | 327   | 154          | -        | 154       | 101    | -        | 101   | 255                  | -        | 255   | 2.27                         | 2.27     | 0.70  | 0.70                       | 1.37     | 0.42  | 1.19                           | -        | 1.19  | 11/1                       | 26/6  | 26/6 | 8/1                   | 2 | 178      | 0.52 |
| ...Mos Av |                    |      |       |                  |          |       |                      |          |       |              |          |           |        |          |       |                      |          |       |                              |          |       |                            |          |       |                                |          |       |                            |       |      |                       |   |          |      |
| Rodderup  |                    |      |       |                  |          |       |                      |          |       |              |          |           |        |          |       |                      |          |       |                              |          |       |                            |          |       |                                |          |       |                            |       |      |                       |   |          |      |
| 1. Mos Av | 710                | -    | 710   | 234              | -        | 234   | 3.03                 | -        | 3.03  | 235          | -        | 235       | 47     | -        | 47    | 282                  | -        | 282   | 3.01                         | 3.01     | 1.00  | 1.00                       | 2.02     | 0.83  | 1.14                           | -        | 1.14  | 11/2                       | 13/8  | 13/8 | 4/5                   | 3 | 581      | 0.79 |
| ...Mos Av |                    |      |       |                  |          |       |                      |          |       |              |          |           |        |          |       |                      |          |       |                              |          |       |                            |          |       |                                |          |       |                            |       |      |                       |   |          |      |

## COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱ Rodderup .....✱

Nentsbury      ...      Tons in Deads      ...  
Rodderup      ...      Tons in Deads      ...

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|              |  |
|--------------|--|
|              |  |
| ... Mos. Av. |  |
| ... Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 107          | 26/6          | 234          | 13/8.         |
| February  |              |               |              |               |
| March     |              |               |              |               |
| April     |              |               |              |               |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report of Nenthead Mines February 1942

### REPORT OF NENTHEAD MINES REPORT OF NENTHEAD MINES

FEBRUARY 1942.  
FEBRUARY 1942.

|               | <u>Nentsbury.</u> | <u>Rampgill.</u>      | <u>Rodderup.</u> | <u>Totals.</u>    |
|---------------|-------------------|-----------------------|------------------|-------------------|
| Ore Mined     | 374 Tons          | Conditions unchanged. | 450 Tons         | 824 Tons          |
| Ore Milled    | 374 "             |                       | 450 "            | 824 "             |
| Concs. prdcd. | 25.25 "           |                       | 35.45 "          | 60.70 "           |
| % of Galena   | 6.75 %            |                       | 7.88%            | N. 6.75 R. 7.88 % |
| Hours Worked  | 102 hours         |                       | 94 hrs.          | 102 94 hours.     |
| Tons per hour | 3.66 Tons         |                       | 4.78 Tons        | 3.66 4.78 Tons.   |

#### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>           | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|----------------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.                       | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | 50 Tons           | Nil.             | 150 Tons<br>(about 28% Zn) | Nil.             | 200 "          |

#### XX

Galena at Nentsbury, 43.820 Tons: Potters Ore at Nentsbury, 1.50 Tons.  
 " " Rodderup, 56.013 " : " " " Rodderup, 24.20 " .

|          |                       |            |
|----------|-----------------------|------------|
| COAL     | consumed at Rampgill, | 3.00 Tons. |
| FUEL OIL | " " "                 | 0.20 "     |
| " "      | " " Nentsbury,        | 1.90 "     |
| " "      | " " Rodderup,         | 0.20 "     |

COMPRESSED AIR at NENTHEAD. The Water Supply at Nenthead (Perry Dam) was completely cut off by snow and ice for several days. Consequently the Compressors were unable to work. The short and intermittent periods the Hydro-Compressor and Middlecleugh Compressor were working, produced Compressed Air of from 50 to 70 lbs pressure.

COMPRESSED AIR at RODDERUP was produced mainly by Electricity and equalled on average about 550 cu.ft. per min. at a pressure of 80 lbs. at the face. Very little Compressed Air was produced by Water Power.

## **NENTHEAD MINES FEBRUARY 1942**

**NENTSBURY MINE.** Although during February the Mine and Mill results were effected by almost unprecedented storms of snow and ice, the output, considering the conditions, was better. Some of the ore extracted and crushed was broken during January and left in the stopes, being drawn in February to keep the Mill running as much as possible. We are now benefitting somewhat from the stopes in the parallel branches on Sincay N. & Liverick S. of S.2 Veins where mining is in the middle random.

**WITHERITE.** We have sold for delivery in March the output of 23 Tons of Concentrates produced in January, at £4. 7s. 6d. per ton on site, and a further quantity of lower grade concentrates, about 50 tons, at £2. 17s. 6d. per ton on site.

**MILL.** In good order.

**RODDERUP MINE.** February results were the lowest for more than a year, both in quantities of ore mined and concentrates produced. There are two reasons for the poorer results. The main reason is the series of faults, referred to in previous monthly reports, which dislocated the strata for the whole length of the Flats. So far as is known, these faults, three in number, occurred about 4 to 6 feet apart and each affected the strata. Consequently the furthest point W., 27 feet, indicates that we have at last cut through the faults, and that the strata has been thrown down about 3 feet. There is a 2" rib of Galena visible on the W. side, but until more work is done and forebreast driven forward far enough to be outside the influence of the faults, it will not be possible to state the full effect of the faulting. In all likelihood the output will be low in the meantime. The second reason is the weather. For 3 years in succession the first three months of the year have been exceptionally stormy ones. Heavy snowstorms and ice have held up working conditions. Miners were unable to get to the mine, water supply was frozen and the mill was unable to work part of the time. All these almost unprecedented conditions both in the mine and outside, caused the low output.

**MILL.** In good order.

**SALE OF POTTERS ORE.** A further lot of Ore, dry weight - 28.985 Tons, was sold to the British Pyros White Lead Co., in London, at £19. per ton nett at Alston Station. Owing to the difficulty of shipping Messrs. Morris Ashby Ltd., have been unable to take away a quantity of Lead Ore ready in steel drums for export.

**SALE OF STONE & GRAVEL.** Owing to the weather all sales were suspended.

**SALE OF FLUOR SPAR.** During the month 24.75 Tons was produced and sold.



GENERAL REMARKS. The general position respecting working metalliferous mines is becoming more and more acute. Labour controlled by the Ministry of Labour is difficult to obtain, and although the Government through one department is urging us to increase output, another Government department is periodically calling-up men for military service. The result is increased standing charges, higher wages to workmen, and with regard to the value of Lead Concentrates, based on the price of £25. Per ton fixed in December 1939, this leaves no margin to meet emergencies. Government restrictions and the multiplicity of returns occupy a lot of time.

# N e n t s b u r y      M i n e.

\*\*\*\*\*

Development Footage:- Nil.

J. Armstrong & Partners.

185 Days Worked.

| Veins           | L         | H | S.F. | S.M. | W.        | C.F. | C.M. ) |   |
|-----------------|-----------|---|------|------|-----------|------|--------|---|
| Sincay - String | 30 x 10.5 | - | 315  | -    | 29.26 x 6 | -    | 1890   | - |
| Liverick        | 33 x 11   | - | 363  | -    | 33.72 x 6 | -    | 2178   | - |
| Dupont          | 45 x 6    | - | 270  | -    | 25.09 x 6 | -    | 1620   | - |
|                 |           |   |      |      |           |      | 5688   | - |
|                 |           |   |      |      |           |      | 161.05 | ) |

Tonnage to Mill:- 374 Tons

Wages Paid: £109: 8: 4.

Cost per Cu.M.:- 13/6.

---

# R o o d d e r u p      M i n e.

\*\*\*\*\*

Development Footage:- Nil.

J. Johnston & Partners.

190½ Days Worked.

## West Flats.

|                | L       | W | S.F. | S.M. | H.         | C.F. | C.M. ) |   |
|----------------|---------|---|------|------|------------|------|--------|---|
| No.5 Bottom    | 17 x 10 | - | 170  | -    | 15.79 x 12 | -    | 2040   | - |
| " 4 Top        | 27 x 12 | - | 324  | -    | 30.10 x 6  | -    | 1944   | - |
| " " "          | 11 x 18 | - | 198  | -    | 18.39 x 6  | -    | 1188   | - |
| " " "          | 11 x 13 | - | 143  | -    | 13.28 x 6  | -    | 758    | - |
| Reserve Pillar | 13 x 11 | - | 143  | -    | 13.29 x 6  | -    | 758    | - |
|                |         |   |      |      |            |      | 6688   | - |
|                |         |   |      |      |            |      | 189.36 | ) |

Tonnage to Mill:- 450 Tons

Wages Paid: £111:11:10.

Cost per Cu.M.:- 11/9.

| MINE STATISTICS    |  |                |  |                  |  |                |  |                      |  |                |  |                |  |                |  |                      |  |                |  | February 1942.               |  |                |  |                     |  |                |  |                            |  |                |  |                                |  |                |  |                            |  |                |  |                           |  |                |  |          |  |
|--------------------|--|----------------|--|------------------|--|----------------|--|----------------------|--|----------------|--|----------------|--|----------------|--|----------------------|--|----------------|--|------------------------------|--|----------------|--|---------------------|--|----------------|--|----------------------------|--|----------------|--|--------------------------------|--|----------------|--|----------------------------|--|----------------|--|---------------------------|--|----------------|--|----------|--|
| Tons of Ore Mined. |  |                |  | Cubic Metres Cut |  |                |  | Tons per Cubic Metre |  |                |  | Days Worked.   |  |                |  | Tons per Miner's Day |  |                |  | Cubic Metres per Miner's Day |  |                |  | Per Underground Man |  |                |  | Wages paid per Miner's Day |  |                |  | Wages paid per Underground Man |  |                |  | Wages paid per Cubic Metre |  |                |  | No. of Drills Working     |  |                |  | Dynamite |  |
| Headings.          |  | Dev.           |  | Total            |  | In Ore         |  | In Dead              |  | Total          |  | In Ore         |  | In Dead        |  | Total                |  | In Ore         |  | In Dead                      |  | Total          |  | Bar-                |  | Wages          |  | Total                      |  | In Ore         |  | In Dead                        |  | Total          |  | Headings                   |  | Total          |  | Wages paid per ton of Ore |  | lbs.           |  | per ton  |  |
| Nentsbury          |  | 374            |  | -                |  | 232            |  | 161                  |  | -              |  | 185            |  | -              |  | 232                  |  | -              |  | 107                          |  | -              |  | 107                 |  | -              |  | 232                        |  | -              |  | 107                            |  | -              |  | 107                        |  | 107            |  | 107                       |  | 107            |  |          |  |
| 1 Mos. Av.         |  | 350            |  | -                |  | 327            |  | 107                  |  | -              |  | 154            |  | -              |  | 255                  |  | -              |  | 107                          |  | -              |  | 107                 |  | -              |  | 255                        |  | -              |  | 107                            |  | -              |  | 107                        |  | 107            |  | 107                       |  | 107            |  |          |  |
| 2 Mos. Av.         |  | 362            |  | -                |  | 270            |  | 134                  |  | -              |  | 109            |  | -              |  | 255                  |  | -              |  | 74                           |  | -              |  | 74                  |  | -              |  | 255                        |  | -              |  | 74                             |  | -              |  | 74                         |  | 74             |  | 74                        |  | 74             |  |          |  |
| Rodderup           |  | 450            |  | -                |  | 238            |  | 184                  |  | -              |  | 191            |  | -              |  | 232                  |  | -              |  | 41                           |  | -              |  | 41                  |  | -              |  | 232                        |  | -              |  | 41                             |  | -              |  | 41                         |  | 41             |  | 41                        |  | 41             |  |          |  |
| 1 Mos. Av.         |  | 710            |  | -                |  | 303            |  | 234                  |  | -              |  | 235            |  | -              |  | 232                  |  | -              |  | 47                           |  | -              |  | 47                  |  | -              |  | 232                        |  | -              |  | 47                             |  | -              |  | 47                         |  | 47             |  | 47                        |  | 47             |  |          |  |
| 2 Mos. Av.         |  | 580            |  | -                |  | 212            |  | 212                  |  | -              |  | 213            |  | -              |  | 257                  |  | -              |  | 44                           |  | -              |  | 44                  |  | -              |  | 257                        |  | -              |  | 44                             |  | -              |  | 44                         |  | 44             |  | 44                        |  | 44             |  |          |  |
| Nentsbury          |  | Tons in Deaths |  | Tons in Deaths   |  | Tons in Deaths |  | Tons in Deaths       |  | Tons in Deaths |  | Tons in Deaths |  | Tons in Deaths |  | Tons in Deaths       |  | Tons in Deaths |  | Tons in Deaths               |  | Tons in Deaths |  | Tons in Deaths      |  | Tons in Deaths |  | Tons in Deaths             |  | Tons in Deaths |  | Tons in Deaths                 |  | Tons in Deaths |  | Tons in Deaths             |  | Tons in Deaths |  | Tons in Deaths            |  | Tons in Deaths |  |          |  |
| Rodderup           |  | Tons in Deaths |  | Tons in Deaths   |  | Tons in Deaths |  | Tons in Deaths       |  | Tons in Deaths |  | Tons in Deaths |  | Tons in Deaths |  | Tons in Deaths       |  | Tons in Deaths |  | Tons in Deaths               |  | Tons in Deaths |  | Tons in Deaths      |  | Tons in Deaths |  | Tons in Deaths             |  | Tons in Deaths |  | Tons in Deaths                 |  | Tons in Deaths |  | Tons in Deaths             |  | Tons in Deaths |  | Tons in Deaths            |  | Tons in Deaths |  |          |  |
| Nentsbury          |  | 107            |  | 107              |  | 107            |  | 107                  |  | 107            |  | 107            |  | 107            |  | 107                  |  | 107            |  | 107                          |  | 107            |  | 107                 |  | 107            |  | 107                        |  | 107            |  | 107                            |  | 107            |  | 107                        |  | 107            |  | 107                       |  | 107            |  | 107      |  |
| 1 Mos. Av.         |  | 234            |  | 234              |  | 234            |  | 234                  |  | 234            |  | 234            |  | 234            |  | 234                  |  | 234            |  | 234                          |  | 234            |  | 234                 |  | 234            |  | 234                        |  | 234            |  | 234                            |  | 234            |  | 234                        |  | 234            |  | 234                       |  | 234            |  | 234      |  |
| 2 Mos. Av.         |  | 184            |  | 184              |  | 184            |  | 184                  |  | 184            |  | 184            |  | 184            |  | 184                  |  | 184            |  | 184                          |  | 184            |  | 184                 |  | 184            |  | 184                        |  | 184            |  | 184                            |  | 184            |  | 184                        |  | 184            |  | 184                       |  | 184            |  | 184      |  |
| Nentsbury          |  | 107            |  | 107              |  | 107            |  | 107                  |  | 107            |  | 107            |  | 107            |  | 107                  |  | 107            |  | 107                          |  | 107            |  | 107                 |  | 107            |  | 107                        |  | 107            |  | 107                            |  | 107            |  | 107                        |  | 107            |  | 107                       |  | 107            |  | 107      |  |
| 1 Mos. Av.         |  | 1315           |  | 1315             |  | 1315           |  | 1315                 |  | 1315           |  | 1315           |  | 1315           |  | 1315                 |  | 1315           |  | 1315                         |  | 1315           |  | 1315                |  | 1315           |  | 1315                       |  | 1315           |  | 1315                           |  | 1315           |  | 1315                       |  | 1315           |  | 1315                      |  | 1315           |  | 1315     |  |
| 2 Mos. Av.         |  | 1415           |  | 1415             |  | 1415           |  | 1415                 |  | 1415           |  | 1415           |  | 1415           |  | 1415                 |  | 1415           |  | 1415                         |  | 1415           |  | 1415                |  | 1415           |  | 1415                       |  | 1415           |  | 1415                           |  | 1415           |  | 1415                       |  | 1415           |  | 1415                      |  | 1415           |  | 1415     |  |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|     |          |
|-----|----------|
| ... | Mos. Av. |
| ... | Mos. Av. |

# COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱..... Rodderup .....✱

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

| Mos. Av.    |  |
|-------------|--|
| ...Mos. Av. |  |

## Report of The Nenthead Mines March 1942

### REPORT OF THE NENTHEAD MINES

MARCH 1942

|                                 | <u>Nentsbury.</u>   | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u>   |
|---------------------------------|---------------------|------------------|------------------|------------------|
| Ore Mined                       | (120 Tons Witherite | Parts of         | 420 Tons         | 817 Tons.        |
|                                 | (277 " Galena       | Jiggers,         |                  |                  |
| Ore Milled                      | 397 "               | Belts, etc,      | 420 "            | 817 "            |
|                                 |                     | have been        |                  |                  |
| BaCO <sub>3</sub> Concs. prdcd. | 43.0 Tons           | removed to       | -                | 43.0 "           |
|                                 |                     | be used at       |                  |                  |
| Galena "                        | 18.6 "              | Rodderup.        | 38.3 "           | 56.9 "           |
| % BaCO <sub>3</sub>             | 35.8%               |                  | -                | N. R. 35.8% -- % |
| % Lead Ore                      | 6.71%               |                  | 9.12%            | 6.71% 9.12%      |
| Hours Worked                    | 102 hrs.            |                  | 88 hrs.          | 102 88 hrs.      |
| Tons per hour                   | 3.9 Tons            |                  | 4.77 Tons        | 3.9 4.77 Tons.   |

### S T O C K S .

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.             | 2500 Tons        | 2500 Tons.     |
| Blende-Witherite | 50 Tons           | Nil.             | 150 Tons         | Nil.             | 200 "          |
|                  |                   |                  | (about 28% Zn.)  |                  |                |

Galena at Nentsbury, 58.215 Tons; Potters Ore at Nentsbury, 2.29 Tons  
 " " Rodderup, 38.763 " ; " " " Rodderup, 24.20 "

COAL consumed at Rampgill, 1.50 Tons.  
 FUEL OIL " " " , Nil.  
 " " " Nentsbury, 2.00 "  
 " " " Rodderup, 0.200 "

COMPRESSED AIR at NENTHEAD. The severe weather continued for the greater part of the month, and made it impossible often to get to Perry Dam or Middlecleugh. Compressed Air produced, was from 400 to 500 cu. ft. per minute. The pressure was about 60 lbs. per square inch.

COMPRESSED AIR at RODDERUP, produced mainly by Electricity because of the shortage of water, amounted to about 500 to 600 cubic feet per minute at 80 lbs. pressure.

**NENTHEAD MINES**  
**MARCH 1942**

NENTSBURY MINE. The weather conditions during March affected Nentsbury, but not to the extent as Rodderup was affected.

We have produced both Witherite and Lead Concentrates, and have mined and crushed 120 Tons of Witherite ore, producing 43 Tons of Concentrates, that is 35.8% recovery, and 277 Tons of Lead Ore, producing 18.6 Tons of Concentrates, that is a 6.71% recovery. After completing the order for Witherite, Lead Ore mining and crushing will be resumed.

MILL. In good order.

RODDERUP MINE. The results for March were low, due to weather conditions and shortage of labour and illness of employees. The faults recently encountered, and referred to in previous reports, threw the strata down on the W. side, and consequently the roof, formerly Limestone, is now plate and dangerous if worked on a wide front.

It is pleasing to be able to report that Galena in payable quantities is visible on the "W" side and either the strata rises going West or another fault between where the Flats are worked, and the X-cut further North, has thrown the strata up. The outlook has improved in the mine, but labour shortage is most acute. We are continually losing men for the forces.

The difficulty in carrying on the mine to meet costs is becoming acute. It is possible the Government may try to improve labour conditions soon.

MILL. In good order.

SALE OF ORE. Monthly supplies of about 30 Tons are going to the Pyros White Lead Co. in London, and the remainder of the production is sold to Messrs. Walkers Parker & Co., Ltd., Newcastle. Messrs, Morris Ashby Ltd., are unable to obtain shipping space to carry the orders now on our books.

MARCH 1942.

## N e n t s b u r y   M i n e .

0200 0000000000000000 000000000000

Development Footage:- Nil.

H. Kielty & Partners.

138 Days Worked.

Vein.

|                  | L  | H    | S.F.  | S.M.    | W.  | C.F.   | C.M.    | ) |
|------------------|----|------|-------|---------|-----|--------|---------|---|
| Sincay String N. | 7  | x 12 | - 84  | - 7.80  | x 6 | - 504  | - 14.27 | ) |
| " " S.           | 9  | x 10 | - 90  | - 8.36  | x 6 | - 540  | - 15.29 | ) |
| Witherite.       | 14 | x 9  | - 126 | - 11.70 | x 6 | - 756  | - 21.41 | ) |
| Liverick String. | 34 | x 7  | - 238 | - 22.10 | x 6 | - 1428 | - 40.43 | ) |
|                  |    |      |       |         |     | 3228   | - 91.40 | ) |

@ Days Wages.

Tonnage to Mill:- 397

Wages Paid £110: 10: 4.

Cost per Cu.M. : )- 24/2.

R o d d e r u p   M i n e.

Development Footage:- Nil.

Jos. Johnston & Partners.      WEST FLATS.      198 Days Worked.

|                | L       | W | S.F. | S.M. | H.         | C.F. | C.M.          |
|----------------|---------|---|------|------|------------|------|---------------|
| No.5 Bottom    | 12 x 10 | - | 120  | -    | 11.15 x 13 | -    | 1560 - 44.17  |
| " 4.Top        | 22 x 8  | - | 176  | -    | 16.35 x 6  | -    | 1056 - 29.90  |
| " " "          | 13 x 8  | - | 104  | -    | 9.66 x 6   | -    | 624 - 17.67   |
| Reserve Pillar | 19 x 11 | - | 209  | -    | 19.42 x 6  | -    | 1254 - 35.51  |
| " " "          | 19 x 10 | - | 190  | -    | 17.65 x 6  | -    | 1140 - 32.28  |
|                |         |   |      |      |            |      | 5634 - 159.53 |

Tonnage to Mill:- 420

Wages Paid:- £155: 10: 11.

Cost per Cu.M. :- 14/7.

# MINE STATISTICS

March 1942.

|  | Tons of Ore Mined. |  | Cubic Metres Cut |       |  | Tons per Cubic Metre |        |  | Days Worked. |         |  |  |        |  | Tons per Miner's Day |         | Cubic Metres per Miner's Day |  | Per Underground Man |  | Wages paid per Miner's Day |       | Wages paid per Underground Man |  | Wages paid per Cubic Metre |  | No. of Drills Working |         | Dynamite |  |       |  |  |          |  |  |      |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |
|--|--------------------|--|------------------|-------|--|----------------------|--------|--|--------------|---------|--|--|--------|--|----------------------|---------|------------------------------|--|---------------------|--|----------------------------|-------|--------------------------------|--|----------------------------|--|-----------------------|---------|----------|--|-------|--|--|----------|--|--|------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|----------|--|--|-------|--|--|
|  |                    |  |                  |       |  |                      |        |  | Labourers    |         |  |  |        |  |                      |         |                              |  |                     |  |                            |       |                                |  |                            |  |                       |         |          |  |       |  |  |          |  |  |      |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |          |  |  |       |  |  |
|  | Miners             |  |                  | Total |  |                      | In Ore |  |              | In Dead |  |  | In Ore |  |                      | In Dead |                              |  | Bar.                |  |                            | Total |                                |  | In Ore                     |  |                       | In Dead |          |  | Total |  |  | Headings |  |  | Dev. |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  | Headings |  |  | Total |  |  |

## COMPARATIVE STATEMENT.

Nentsbury      Tons in Deaths      Rodderup      Tons in Deaths

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 107          | 26/6          | 234          | 13/5          |
| February  | 181          | 16/12         | 189          | 14/5          |
| March     | 91           | 28/10         | 160          | 16/-          |
| April     |              |               |              |               |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings worked in your letter of 3rd June, 1932.

Nentsbury

|              |  |
|--------------|--|
| ... Mos. Av. |  |
| ... Mos. Av. |  |

## Report of The Nenthead Mines April 1942

### REPORT OF THE NENTHEAD MINES

APRIL 1942.

|                                | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------------------|-------------------|------------------|------------------|----------------|
| Ore Mined:                     |                   |                  |                  |                |
| Witherite                      | 214 Tons)         | All sand         |                  | 214 Tons       |
| Lead Ore                       | 187 " )           | concentrat       | 457 Tons         | 644 "          |
|                                |                   | ing tables       |                  |                |
| Ore Milled                     | 401 "             | have been        | 457 "            | 858 "          |
|                                |                   | removed.         |                  |                |
| BaCO <sub>3</sub> Concs. prcd. | 66.00 "           | One good         | -                | 66.00 "        |
| Galena " "                     | 13.00 "           | table has        | 41.50 "          | 54.50 "        |
|                                |                   | been sent        |                  |                |
| BaCO <sub>3</sub> % Recovery   | 30.8%             | to Rodder        | N.               | R.             |
|                                |                   | up, and          | 30.8%            | -              |
| Lead Ore % "                   | 6.95%             | others           | -                | -              |
|                                |                   | demolished       | 9.0%             | 9.0%           |
|                                |                   | for scrap.       | 6.95%            | 9.0%           |
| Hours Worked                   | 109 hrs.          |                  | 93 hrs. 109 hrs  | 93.hrs.        |
| Tons per hour                  | 3.68 Tons         |                  | 4.91 Tons 3.68   | 4.91 Tons      |

#### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|------------------|----------------|
| Crude Ore.       | Nil.              | Nil.             | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | 50 Tons           | Nil.             | 150 Tons         | Nil.             | 200 "          |
|                  |                   |                  | (about 28% Zn.)  |                  |                |

Galena at Nentsbury, 15.382 Tons; Potters Ore at Nentsbury, 1.50 Tons  
 " " Rodderup, 37.579 " ; " " " Rodderup, 24.20 "

COAL consumed at Rampgill, 1.30 Tons.  
 FUEL OIL " " " Nil.  
 " " " Nentsbury, 1.50 "  
 " " " Rodderup, Nil.

Witherite Concentrates sold but in stock, 132 Tons.  
 Fluor Spar produced and sold, 24.5 "

COMPRESSED AIR produced at Nenthead, All Compressed Air is produced by Water Power. Average amount is 500 cu. ft. per minute, at from 70 to 80 lbs pressure in mine.

COMPRESSED AIR produced at Rodderup, Compressed Air for Pumping and for Rock Drills is produced by Electricity and Water. Amount about 600 cu. ft. per minute at 80 lbs pressure per square inch.

## **NENTHEAD MINES**

### **APRIL 1942**

NENTSBURY MINE. Weather conditions improved during April.

To produce the quantity of Witherite Concentrates required to fulfil the order from Messrs. Smith & Walton Ltd., Haltwhistle, 214 Tons of Witherite ore from the Treloar Vein were mined and crushed, from which 66 Tons of Concentrates was produced equal to 30.80% recovery. This quantity, with what was produced earlier in the year, are still in stock, a total of 132 Tons plus 50 Tons of lower grade. There were also 187 Tons of Lead Ore mined and crushed from which 13 Tons of Concentrates were produced, a recovery of 6.95%.

MILL. In good running order.

RODDERUP MINE. Rodderup mine, as well as Nentsbury, is suffering badly for lack of skilled miners. The ore on the W. side of the fault is of fair quality and will no doubt improve as we get further W., and have a Limestone roof instead of a plate roof, but the small number of rock drill miners can only break about 50% of the quantity required to fully maintain the Mill. Applications have been made for the release of miners from the armed forces, with little success.

MILL. In good order.

SALE OF POTTERS ORE. Monthly sales of Potters Ore to the Pyros White Lead Co., London, are made and monthly payments received. Such ore as cannot be sold to Morris Ashby & The Pyros Co., are sold to the smelters Messrs. Walkers Parker & Co., Ltd., Newcastle. Morris Ashby's parcels have been held up, and still are, owing to shipping difficulties and the war situation in India and the Malay peninsula.

GRAVEL SALES. The improvement in the weather has caused more new work to be put in hand. All gravel produced this year has been sold and will be despatched at the rate of 20 Tons daily, or more.

GENERAL. As reported in a separate report, filed under "Personal Letters", I paid a visit to London on the 7<sup>th</sup>, 8<sup>th</sup>, 9<sup>th</sup> and 10<sup>th</sup> of April, at the request of the Controller of the Non-Ferrous Mineral Development Control to discuss the position of the Government taking over and working the dumps at Nenthead. Investigations and reports have been made continuously by several engineers and technicians for the Government during the past 1½ years. So far no decision has been reached, neither have the Government taken over the dumps or made the Company a definite offer.

I have seen the agents for the Lords of the Admiralty and Lord Allendale and prepared them for a quick decision if Government decide to make an offer. Everything possible to safeguard the Company's interest has been done and will be done. The long period, over 1½ years, during which the Government has been messing about, has handicapped the working of the mines as I would like. No assistance has been given re: labour, and it is doubtful if the Government department dealing with mines can obtain the necessary supply of



labour. I had an opportunity of discussing the general situation with Mr. Hallett before I returned to Nenthead.

Nentsbury Mine.  
 @@@@@@@@@@@@@@ @@@@@@

Development Footage:- Nil.

H. Kielty & Partners.

168½ days worked.

Vein.

|                              | L  | H    | S.F.    | S.M.    | W.  | C.F.   | C.M.     |                |
|------------------------------|----|------|---------|---------|-----|--------|----------|----------------|
| Sincay String N.             | 12 | x 10 | - 120.0 | - 11.15 | x 6 | - 720  | - 20.39  | )              |
| " " S.                       | 3  | x 12 | - 36.0  | - 3.34  | x 6 | - 216  | - 6.12   | )              |
| Treloar (BaCO <sub>3</sub> ) | 12 | x 9  | - 108.0 | - 10.03 | x 6 | - 648  | - 18.35  | )              |
| Dupont S.Drive               | 4½ | x 7  | - 31.5  | - 2.93  | x 5 | - 157  | - 4.44   | ) @ Days Wages |
| Liverick String.             | 26 | x 12 | - 312.0 | - 28.98 | x 6 | - 1872 | - 53.00  | )              |
|                              |    |      |         |         |     | 3613   | - 102.30 | )              |

Tonnage to Mill:- 401

Wages Paid: £99: 2: 10.

Cost per Cu.M.:- 19/4.

---

Rodderup Mine.  
 @@@@@@@@@@@@@@ @@@@@@

Development Footage:- Nil.

West Flats.

Jos. Johnston & Partners.

201 Days Worked.

|             | L  | W    | S.F.  | S.M.    | H.   | C.F.   | C.M.     |                |
|-------------|----|------|-------|---------|------|--------|----------|----------------|
| No.5 Bottom | 11 | x 11 | - 121 | - 11.24 | x 12 | - 1452 | - 41.11  | )              |
| No.4 Top    | 17 | x 10 | - 170 | - 15.79 | x 6  | - 1020 | - 28.88  | )              |
| " " "       | 29 | x 6  | - 174 | - 16.16 | x 8  | - 1392 | - 39.41  | )              |
| " " "       | 11 | x 6  | - 66  | - 6.13  | x 8  | - 528  | - 14.95  | )              |
| Pillar      | 7  | x 12 | - 84  | - 7.80  | x 6  | - 504  | - 14.27  | ) @ Days Wages |
| Side        | 3  | x 11 | - 33  | - 3.67  | x 6  | - 193  | - 5.61   | )              |
|             |    |      |       |         |      | 5094   | - 144.23 | )              |

Tonnage to Mill:- 457

Wages Paid:- £117. 2. 7.

Cost per Cu.M.:- 16/3.

# MINE STATISTICS

1942.

|           | Tons of Ore Mined.   |   |     | Cubic Metres Cut      |   |     | Tons per Cubic Metre  |   |      | Days Worked.                |   |     | Tons per Miner's Day        |      |      | Cubic Metres per Miner's Day |      |      | Per Underground Man         |     |   | Wages paid per Miner's Day  |      |      | Wages paid per Underground Man |   |     | Wages paid per Cubic Metre  |  |  | No. of Drills Working       |  | Dynamite |              |  |
|-----------|----------------------|---|-----|-----------------------|---|-----|-----------------------|---|------|-----------------------------|---|-----|-----------------------------|------|------|------------------------------|------|------|-----------------------------|-----|---|-----------------------------|------|------|--------------------------------|---|-----|-----------------------------|--|--|-----------------------------|--|----------|--------------|--|
|           | Headings. Dev. Total |   |     | In Ore In Deads Total |   |     | In Ore In Deads Total |   |      | In Ore In Deads Wages gains |   |     | In Ore In Deads Wages gains |      |      | In Ore In Deads Wages gains  |      |      | In Ore In Deads Wages gains |     |   | In Ore In Deads Wages gains |      |      | In Ore In Deads Wages gains    |   |     | In Ore In Deads Wages gains |  |  | In Ore In Deads Wages gains |  |          | lbs. per ton |  |
|           |                      |   |     |                       |   |     |                       |   |      |                             |   |     |                             |      |      |                              |      |      |                             |     |   |                             |      |      |                                |   |     |                             |  |  |                             |  |          |              |  |
| Nentsbury | 401                  | - | 401 | 102                   | - | 102 | 3.43                  | - | 3.43 | 108                         | - | 108 | 212                         | 2.38 | 2.38 | 0.60                         | 0.60 | 1.89 | 0.48                        | 119 | - | 119                         | 111% | 111% | 510                            | 3 | 245 | 0.61                        |  |  |                             |  |          |              |  |
| 3 Mos Av  | 374                  | - | 374 | 120                   | - | 120 | 2.91                  | - | 2.91 | 175                         | - | 175 | 441                         | 2.15 | 2.15 | 0.68                         | 0.68 | 1.55 | 0.44                        | 119 | - | 119                         | 111% | 111% | 510                            | 3 | 102 | 0.43                        |  |  |                             |  |          |              |  |
| 4 Mos Av  | 381                  | - | 381 | 116                   | - | 116 | 3.25                  | - | 3.25 | 173                         | - | 173 | 234                         | 2.19 | 2.19 | 0.60                         | 0.60 | 1.65 | 0.49                        | 119 | - | 119                         | 111% | 111% | 510                            | 3 | 183 | 0.48                        |  |  |                             |  |          |              |  |
| Rodderup  | 457                  | - | 457 | 144                   | - | 144 | 3.17                  | - | 3.17 | 201                         | - | 201 | 227                         | 2.27 | 2.27 | 0.71                         | 0.71 | 2.01 | 0.63                        | 118 | - | 118                         | 118  | 118  | 510                            | 3 | 451 | 0.49                        |  |  |                             |  |          |              |  |
| 3 Mos Av  | 517                  | - | 517 | 145                   | - | 145 | 2.68                  | - | 2.68 | 208                         | - | 208 | 244                         | 2.47 | 2.47 | 0.94                         | 0.94 | 2.13 | 0.79                        | 117 | - | 117                         | 117  | 117  | 510                            | 3 | 481 | 0.46                        |  |  |                             |  |          |              |  |
| 4 Mos Av  | 510                  | - | 510 | 182                   | - | 182 | 2.80                  | - | 2.80 | 206                         | - | 206 | 240                         | 2.42 | 2.42 | 0.90                         | 0.90 | 2.04 | 0.75                        | 117 | - | 117                         | 117  | 117  | 510                            | 3 | 474 | 0.47                        |  |  |                             |  |          |              |  |

## COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱..... Rodderup .....✱

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 107          | 266           | 134          | 138           |
| February  | 161          | 161%          | 139          | 145           |
| March     | 91           | 2510          | 160          | 161           |
| April     | 101          | 2311          | 144          | 154.          |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

## Report of the Nenthead Mines May 1942

### REPORT OF THE NENTHEAD MINES

MAY 1942.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u>                            | <u>Rodderup.</u> | <u>Totals.</u> |
|------------------|-------------------|---------------------------------------------|------------------|----------------|
| Ore Mined (Lead) | 288 Tons          | The Govern                                  | 370 Tons         | 658 Tons       |
| Ore Milled       | 288 "             | ment have                                   | 370 "            | 658 "          |
| Concs. Produced  | 14.30 "           | informed                                    | 33.95 "          | 48.25 "        |
| % of Galena      | 4.98%             | us they                                     | 9.00%            | 4.98 R.        |
| Hours Worked     | 79 hrs.           | will requi                                  | 76 hrs.          | 79 78 hrs.     |
| Tons per hour    | 3.65 Tons         | sition the                                  | 4.74 Tons        | 3.65 4.74 Tons |
|                  |                   | Mill Build                                  |                  |                |
|                  |                   | ing, remove                                 |                  |                |
|                  |                   | the machin                                  |                  |                |
|                  |                   | ery for us                                  |                  |                |
|                  |                   | to dispose                                  |                  |                |
|                  |                   | of, and er                                  |                  |                |
|                  |                   | ect a new                                   |                  |                |
|                  |                   | large flot                                  |                  |                |
|                  |                   | ation plant                                 |                  |                |
|                  |                   | to treat                                    |                  |                |
|                  |                   | the dumps. The Legal Officers               |                  |                |
|                  |                   | of the Crown are preparing the documents at |                  |                |
|                  |                   | present.                                    |                  |                |

#### STOCKS.

|                      | <u>Nentsbury.</u> | <u>Rampgill.</u>          | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|----------------------|-------------------|---------------------------|------------------|------------------|----------------|
| Crude Ore            | Nil.              | Nil.                      | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende-Witherite     | 50 Tons           | Nil.                      | 150 Tons         | Nil.             | 200 "          |
|                      |                   |                           | (about 28% Zn.)  |                  |                |
| Galena at Nentsbury, | 27.682 Tons;      | Potters Ore at Nentsbury, | 1.50 Tons        |                  |                |
| " " Rodderup,        | 32.156 "          | " " " Rodderup,           | 24.20 "          |                  |                |

COAL consumed at Rampgill, 0.70 Tons.  
 FUEL OIL " " " Nil.  
 " " " " Nentsbury, } From surplus  
 " " " " Rodderup, } Stock.

WITHERITE Concentrates sold and in stock, 132 Tons.  
 FLUOR SPAR produced and sold, 61.60 Tons.

COMPRESSED AIR produced at Nenthead, from Water Power, about 560 cu.ft.,  
 per minute at from 70 to 80 lbs  
 pressure in the Mine.

COMPRESSED AIR produced at Rodderup, from Electricity, about 600 cu.ft.  
 per minute at 80 to 85 lbs pressure  
 at the face.

## **NENTHEAD MINES MAY 1942**

NENTSBURY MINE. The general conditions in the mine have shown no improvement. The Government through the Ministry of Supply have control of all productions and, irrespective of profit or loss, dictate must or must not be produced. It is impossible now to act without permission and so far all interference has tended to increase costs and reduce production. The reduction in the grader of Lead Ore mined during May cannot be attributed to interference by the Government directly, but indirect interference through labour conditions and other means, has caused a general slowing down with lower results.

MILL. In good repair and order.

RODDERUP MINE. The series of faults crossing the Flats have had a serious effect on the deposition of the ore. The Strata is sometimes thrown down by a fault and arrangements have to be made to mine it at greater depth. This means that, more of the unpayable rock is broken. After working some weeks another fault throws the Strata up, and the same thing occurs, viz: more poor rock has to be broken. I have decided to remove two thirds of the small number of miners, to work East of the incline where the ore is more evenly deposited and continue to drive a forebreast West to prove if more settled ground and better ore lies ahead. The labour question is still very acute.

MILL. In good order.

SALES OF POTTERS ORE. The sale of Potters Ore continues with the Pyros Co. near London, for the better quality, while lower grade ore is sent to Messrs. Walkers Parkers, Newcastle. It is possible that some of the ore stocked in drums for Messrs. Morris Ashby for some months now, will be shipped next month, as a shipping opportunity may be available.

GRAVEL SALES. These are being me; regularly.

GENERAL. We maintaining our financial position, but with less labour and higher costs, in spite of every possible economy, there is no likelihood of much profit unless richer ore is discovered and more labour available.

### Government, Rampgill Mill & Dumps.

Owing to the War, the Government, who for upwards of two years, have inspected and sampled both the dumps and Nentsbury Mine, have intimated that Rampgill Mill and the dumps will be requisitioned by them, the machinery removed from the mill and a new mill erected. Negotiations are still going on, but to date no definite offer has been made. As a matter of fact the Government can. commandeer any property in the national interest, not being worked, and without paying much, if anything, for it. I am doing my utmost in the Company's interests.

MAY 1942.

## N e n t s b u r y   M i n e .

0000000000000000000000000000000000000000000000000000000

Development Footage:- Nil.

H. Kielty &amp; Partners.

180 Days Worked.

Vein.

| Team.            | L. | H.   | S.F.  | S.M.    | W.  | C.F.   | C.M.     |                |
|------------------|----|------|-------|---------|-----|--------|----------|----------------|
| Sincey String N. | 16 | x 10 | - 160 | - 14.86 | x 6 | - 960  | - 27.18  | ) @ Days Wages |
| " " S.           | 19 | x 12 | - 228 | - 21.18 | x 6 | - 1368 | - 38.73  |                |
| Liverick "       | 28 | x 14 | - 392 | - 36.42 | x 6 | - 2352 | - 66.60  |                |
| Dupont "Drive    | 9  | x 7  | - 63  | - 5.85  | x 5 | - 315  | - 8.92   |                |
|                  |    |      |       |         |     | 4005   | - 141.43 | )              |

Tonnage to Mill:- 238

Wages Paid: £103. 2. 5.

Cost per Cu.M.:- 13s/10d.

R o d d e r u p    M i n e.

[illegible]

Development Footage:- Nil.

West Flats.

Jos. Johnston & Partners.

179 Days Worked.

| Flat.        | L  | W    | S.F.  | S.M.    | H.   | C.F.   | C.M.     |                |
|--------------|----|------|-------|---------|------|--------|----------|----------------|
| No. 5 Bottom | 7  | x 11 | - 77  | - 7.15  | x 12 | - 924  | - 26.16  | )              |
| " " Side     | 6  | x 7  | - 42  | - 3.90  | x 8  | - 336  | - 9.51   | )              |
| " 4 Top      | 17 | x 6  | - 102 | - 9.48  | x 8  | - 816  | - 23.10  | ) @ Days Wages |
| " " "        | 15 | x 6  | - 90  | - 8.36  | x 8  | - 720  | - 20.39  | )              |
| " " "        | 24 | x 7  | - 168 | - 15.61 | x 6  | - 1008 | - 28.54  | )              |
| " " Side.    | 10 | x 4  | - 40  | - 3.72  | x 6  | - 240  | - 6.79   | )              |
|              |    |      |       |         |      | 4044   | - 114.49 | )              |

Tonnage to Mill:- 370

Wages Paid: £104. 3. 7.

Cost per Cu.M.:- 18/9.

# MINE STATISTICS

May 1942.

|           | Tons of Ore Mined. |      |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |        | Days Worked. |                 |       |        |         |       | Tons per Miner's Day |              |          | Cubic Metres per Miner's Day |       |          | Per Underground Man |          |       | Wages paid per Miner's Day |         |     | Wages paid per Underground Man |     |      | Wages paid per Cubic Metre |  |  | No. of Drills Working |  | Dynamite |  |
|-----------|--------------------|------|-------|------------------|---------|-------|----------------------|---------|--------|--------------|-----------------|-------|--------|---------|-------|----------------------|--------------|----------|------------------------------|-------|----------|---------------------|----------|-------|----------------------------|---------|-----|--------------------------------|-----|------|----------------------------|--|--|-----------------------|--|----------|--|
|           |                    |      |       |                  |         |       |                      |         |        | Miners       |                 |       |        |         |       |                      |              |          |                              |       |          |                     |          |       |                            |         |     |                                |     |      |                            |  |  |                       |  |          |  |
|           | Headings.          | Dev. | Total | In Ore           | In Dead | Total | In Ore               | In Dead | In Ore | In Dead      | Bar. Wages gain | Total | In Ore | In Dead | Total | Tons                 | Cubic Metres | Headings | Dev.                         | Total | Headings | Total               | Headings | Total | lbs.                       | per ton |     |                                |     |      |                            |  |  |                       |  |          |  |
|           |                    |      |       |                  |         |       |                      |         |        |              |                 |       |        |         |       |                      |              |          |                              |       |          |                     |          |       |                            |         |     |                                |     |      |                            |  |  |                       |  |          |  |
| Nentsbury | 288                | -    | 288   | 141              | -       | 204   | 180                  | -       | 57     | -            | 27              | -     | 217    | 160     | 160   | 078                  | 078          | 182      | 0.605                        | 115   | -        | 115                 | 1010     | 1010  | 1018                       | 1018    | 812 | 5                              | 290 | 1.00 |                            |  |  |                       |  |          |  |
| 4 Mos Av  | 381                | -    | 381   | 112              | -       | 325   | 173                  | -       | 61     | -            | 234             | -     | 434    | 219     | 219   | 0.60                 | 0.60         | 193      | 0.49                         | 119   | -        | 119                 | 1112     | 1112  | 1118                       | 1118    | 611 | 3                              | 155 | 0.48 |                            |  |  |                       |  |          |  |
| 5 Mos Av  | 302                | -    | 302   | 119              | -       | 301   | 174                  | -       | 56     | -            | 230             | -     | 230    | 207     | 207   | 0.68                 | 0.68         | 157      | 0.52                         | 118   | -        | 118                 | 1111     | 1111  | 1113                       | 1113    | 712 | 3                              | 204 | 0.55 |                            |  |  |                       |  |          |  |
| Rodderup  | 370                | -    | 370   | 114              | -       | 325   | 179                  | -       | 26     | -            | 205             | -     | 205    | 200     | 200   | 0.53                 | 0.53         | 180      | 0.55                         | 117   | -        | 117                 | 1118     | 1118  | 1010                       | 1010    | 610 | 3                              | 431 | 1.10 |                            |  |  |                       |  |          |  |
| 4 Mos Av  | 510                | -    | 510   | 182              | -       | 280   | 200                  | -       | 34     | -            | 240             | -     | 440    | 242     | 242   | 0.40                 | 0.40         | 204      | 0.75                         | 117   | -        | 117                 | 1117     | 1117  | 1517                       | 1517    | 517 | 3                              | 474 | 0.97 |                            |  |  |                       |  |          |  |
| 5 Mos Av  | 492                | -    | 492   | 108              | -       | 289   | 200                  | -       | 33     | -            | 233             | -     | 433    | 235     | 235   | 0.83                 | 0.83         | 199      | 0.71                         | 117   | -        | 117                 | 1117     | 1117  | 1018                       | 1018    | 519 | 3                              | 465 | 1.03 |                            |  |  |                       |  |          |  |

## COMPARATIVE STATEMENT.

\*..... Nentsbury ..... Rodderup .....\*

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|              |  |
|--------------|--|
| .. Mos. Av.  |  |
| ... Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 107          | 210/10        | 234          | 1318          |
| February  | 101          | 101/10        | 189          | 1415          |
| March     | 91           | 2810          | 100          | 10/-          |
| April     | 102          | 231           | 144          | 1814          |
| May       | 141          | 108           | 114          | 2010.         |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

# Report of the Nenthead Mines June 1942

## REPORT OF THE NENTHEAD MINES

JUNE 1942

|               | <u>Nentsbury.</u> | <u>Rampgill.</u>                                                                                                                               | <u>Rodderup.</u> | <u>Totals.</u>  |
|---------------|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|
| Ore Mined     | 351 Tons          | We have very little control of Rampgill now.                                                                                                   | 437 Tons         | 788 Tons        |
| Ore Milled    | 351 "             | The Heads of Agreement have not been received from the Ministry of Supply. Is it definitely stated the Ministry will requisition the Building. | 437 "            | 788 "           |
| Concs. Prdcd. | 20.50 "           | 38.10 "                                                                                                                                        |                  | 58.60 "         |
| % of Galena   | 5.84%             |                                                                                                                                                | 8.71%            | N. 5.84 R. 8.71 |
| Hours worked  | 93.5 hrs.         |                                                                                                                                                | 86 hrs.          | 93.5 86 hrs.    |
| Tons per hour | 3.75 Tons         |                                                                                                                                                | 5.08 Tons        | 3.75 5.08 Tons  |

### STOCKS.

|                      | <u>Nentsbury.</u>                    | <u>Rampgill.</u> | <u>Rodderup.</u>                    | <u>Wellhope.</u> | <u>Totals.</u> |
|----------------------|--------------------------------------|------------------|-------------------------------------|------------------|----------------|
| Crude Ore            | Nil.                                 | Nil.             | Nil.                                | 2500 Tons        | 2500 Tons.     |
| Blende-Witherite     | 50 Tons                              | Nil.             | 150 Tons (about 28% Zn.)            | Nil.             | 200 "          |
| Galena at Nentsbury, | 14.608 Tons (including Potters Ore). |                  |                                     |                  |                |
| " " RRodderup,       | 28.003 "                             |                  | Potters Ore at Rodderup, 4.20 Tons. |                  |                |

Fluor Spar produced and Sold: 24.45 Tons.

|          |                       |      |
|----------|-----------------------|------|
| COAL     | consumed at Rampgill, | Nil. |
| FUEL OIL | " "                   | Nil. |
| " "      | " Nentsbury,          | Nil. |
| " "      | " Rodderup,           | Nil. |

Compressed Air produced at Nenthead, from Water Power, about 550 to 600 cu.ft. per minute at from 70 to 80 lbs. pressure in the mine.

Compressed Air produced at Rodderup, from Electricity and Water Power, about 600 cu.ft. per minute at 80 to 85 lbs pressure in the mine.

## **NENTHEAD MINES**

### **JUNE 1942**

NENTSBURY MINE. The general conditions in the Mine show no appreciable change. The ore is low grade. The labour supply is not sufficient to do any development, neither can we spare the money under present conditions. Both the output of ore and concentrates produced rise to higher figures but no guarantee can be given that higher figures will be maintained.

MILL. In good repair.

RODDERUP MINE. During June both output and values fell off considerably, owing to the loss of rock-drillers to the Government, lower ore values and consequently lower output of concentrates. The series of faults have completely upset the ore deposit in the West section of the Flats and until more work has been done there is no likelihood of any improvement. Miners have been removed to the Incline Section, where pillars of better ore were mined but the output from there did not fully offset the very poor ore mined in the Western Section.

There is no change in the difficult labour position.

MILL. In good order.

SALE OF POTTERS ORE. We have sold Potters Ore to the Pyros White Lead Co. in London, and bulk ore to Walkers Parker & Co., Newcastle. 20 Tons of the Potters Ore ordered in November and December, and paid for in the early part of this year, by Morris Ashby Limited, has been despatched this month. The balance of 4 Tons is expected to be shipped in July.

GRAVEL SALES. These are being made monthly.

GENERAL. With only a small amount of labour and the ever increasing costs, the poor ore in the mines, and handicapped by Government control, the position is not an easy one. Profits are not likely to be made.



JUNE 1942.

**N e n t s b u r y      M i n e.**  
 @@@@@@@@@@@@@@      @@@@@@

Development Footage:- Nil.

H. Kielty & Partners.

179 Days Worked.

Vein.

|                  | L       | H | S.F.              | S.M.    | W.  | C.F.        | C.M. )            |
|------------------|---------|---|-------------------|---------|-----|-------------|-------------------|
| Sincay N. String | 12 x 10 | - | 120               | - 11.15 | x 6 | - 720       | - 20.39 )         |
| " S. "           | 17 x 12 | - | <del>204.95</del> | - 18.95 | x 6 | - 1224      | - 34.65 )         |
| " Stope.         | 13 x 8  | - | 104               | - 9.66  | x 6 | - 624       | - 17.67 ) @ Days  |
| Liverick String  | 24 x 14 | - | 336               | - 31.21 | x 6 | - 2016      | - 57.08 ) Wages   |
|                  |         |   |                   |         |     | <u>4584</u> | - <u>129.79</u> ) |

Tonnage to Mill:- 351 Tons

Wages Paid:- £102. 14. 9.

Cost per Cu.M.:- 15s/10d.

**R o d d e r u p      M i n e.**  
 @@@@@@@@@@@@@@      @@@@@@

Development Footage:- Nil.

Jos. Johnston & Partners.

173½ Days Worked.

West Flats.

|               | L       | W | S.F. | S.M.    | H.   | C.F.        | C.M. )            |
|---------------|---------|---|------|---------|------|-------------|-------------------|
| No.5 Bottom   | 7 x 15  | - | 105  | - 9.75  | x 12 | - 1260      | - 35.68 )         |
| " 4 Top (W)   | 16 x 6  | - | 96   | - 8.92  | x 6  | - 576       | - 16.31 )         |
| " " " N.W.    | 7 x 7   | - | 49   | - 4.55  | x 7  | - 294       | - 8.32 )          |
| " " " fissure | 26 x 9  | - | 234  | - 21.74 | x 7  | - 1638      | - 46.38 ) @ Days  |
| " 2 Bottom    | 26 x 14 | - | 364  | - 33.81 | x 7  | - 2548      | - 72.15 ) Wages   |
| " " Side      | 9 x 14  | - | 126  | - 11.70 | x 8  | - 1008      | - 28.54 )         |
|               |         |   |      |         |      | <u>7324</u> | - <u>207.38</u> ) |

Tonnage to Mill:- 437 Tons

Wages Paid:- £101: 10: 2.

Cost per Cu.M.:- 9s/10d.

# MINE STATISTICS

1942.

|  | Tons of Ore Mined. |  |      |  | Cubic Metres Cut |  |        |  | Tons per Cubic Metre |  |       |  | Days Worked. |  |          |  | Tons per Miner's Day |  |        |  | Cubic Metres per Miner's Day |  |       |  | Per Underground Man |  |          |  | Wages paid per Miner's Day |  |          |  | Wages paid per Underground Man |  |       |  | Wages paid per Cubic Metre |  |       |  | No. of Drills Working |  | Dynamite |  |          |  |         |  |          |  |           |  |          |  |           |  |          |  |           |  |          |  |           |  |          |  |           |  |          |  |           |  |          |  |           |  |          |  |           |  |          |  |           |  |          |  |           |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |
|--|--------------------|--|------|--|------------------|--|--------|--|----------------------|--|-------|--|--------------|--|----------|--|----------------------|--|--------|--|------------------------------|--|-------|--|---------------------|--|----------|--|----------------------------|--|----------|--|--------------------------------|--|-------|--|----------------------------|--|-------|--|-----------------------|--|----------|--|----------|--|---------|--|----------|--|-----------|--|----------|--|-----------|--|----------|--|-----------|--|----------|--|-----------|--|----------|--|-----------|--|----------|--|-----------|--|----------|--|-----------|--|----------|--|-----------|--|----------|--|-----------|--|----------|--|-----------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|--|-------|--|----------|
|  | Headings.          |  | Dev. |  | Total            |  | In Ore |  | In Deads             |  | Total |  | In Ore       |  | In Deads |  | Total                |  | In Ore |  | In Deads                     |  | Total |  | In Ore              |  | In Deads |  | Total                      |  | Headings |  | Dev.                           |  | Total |  | Headings                   |  | Total |  | Headings              |  | Total    |  | lbs.     |  | per ton |  |          |  |           |  |          |  |           |  |          |  |           |  |          |  |           |  |          |  |           |  |          |  |           |  |          |  |           |  |          |  |           |  |          |  |           |  |          |  |           |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |
|  |                    |  |      |  |                  |  |        |  |                      |  |       |  |              |  |          |  |                      |  |        |  |                              |  |       |  |                     |  |          |  |                            |  |          |  |                                |  |       |  |                            |  |       |  |                       |  |          |  |          |  |         |  | Miners   |  | Labourers |  | Miners   |  | Labourers |  | Miners   |  | Labourers |  | Miners   |  | Labourers |  | Miners   |  | Labourers |  | Miners   |  | Labourers |  | Miners   |  | Labourers |  | Miners   |  | Labourers |  | Miners   |  | Labourers |  | Miners   |  | Labourers |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |  |       |  |          |
|  | Headings.          |  | Dev. |  | Total            |  | In Ore |  | In Deads             |  | Total |  | In Ore       |  | In Deads |  | Total                |  | In Ore |  | In Deads                     |  | Total |  | In Ore              |  | In Deads |  | Total                      |  | Headings |  | Dev.                           |  | Total |  | Headings                   |  | Total |  | Headings              |  | Total    |  | Headings |  | Total   |  | Headings |  | Total     |  | Headings |  | Total     |  | Headings |  | Total     |  | Headings |  | Total     |  | Headings |  | Total     |  | Headings |  | Total     |  | Headings |  | Total     |  | Headings |  | Total     |  | Headings |  | Total     |  | Headings |  | Total     |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |  | Total |  | Headings |

## COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱..... Rodderup .....✱

Nentsbury ..... Tons in Deads .....  
Rodderup ..... Tons in Deads .....

Wages paid per Cubic Metre in Headings as reported in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 107          | 24/6          | 234          | 13/8          |
| February  | 161          | 16/15         | 189          | 14/5          |
| March     | 91           | 28/10         | 160          | 16/-          |
| April     | 102          | 23/1          | 144          | 18/4          |
| May       | 141          | 16/8          | 114          | 20/10         |
| June      | 129          | 18/115        | 207          | 4/3           |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report of the Nenthead Mines July 1942

### REPORT OF THE NENTHEAD MINES

JULY 1942

|               | <u>Nentsbury.</u> | <u>Rampgill.</u>                                                      | <u>Rodderup.</u> | <u>Totals.</u>          |
|---------------|-------------------|-----------------------------------------------------------------------|------------------|-------------------------|
| Ore Mined     | 334 Tons          | During July the Ministry of Supply requisitioned Rampgill             | 519 Tons         | 853 <del>813</del> Tons |
| Ore Milled    | 334 "             | Building and commenced dismantling the Coy's plant to treat the dumps | 519 "            | 853 <del>813</del> "    |
| Concs. Prdcd. | 18.60 "           | No Agreement has yet been reached. See separate letters in files.     | 36.95 "          | 55.55 "                 |
| % Galena      | 5.57%             |                                                                       | 7.12%            | 5.57% 7.12%             |
| Hours worked  | 88.50 hours       |                                                                       | 113 hrs.         | 88.50 113 hrs.          |
| Tons per hour | 3.77 Tons         |                                                                       | 4.60 Tons        | 3.77 4.60 Tons.         |

#### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>         | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|--------------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.                     | 2500 Tons        | 2500 Tons      |
| Blende Witherite | 50 Tons           | Nil.             | 150 Tons (about 28% Zn.) | Nil.             | 200 "          |

Galena at Nentsbury, including Potters Ore, 22.95 Tons  
 " " Rodderup, " " " , 12.200 "

Witherite Concentrates despatched and sold:- 56.70 Tons  
 " " in Stock, 74.30 "

Fluor Spar produced and sold:- 10.35 Tons.

COAL consumed at Rampgill, Nil. ( In future no Coal or  
 FUEL OIL " " , Nil. ( Oil will be used at  
 Fuel Oil, consumed at Nentsbury, 1.50 Ton Rampgill, to which no  
 " " " Rodderup, Nil. further reference will  
 be made.

Compressed Air produced at Nenthead, from Water Power, approx. 600 cu.ft. per minute at from 70 to 80 lbs. pressure in the mine.

Compressed Air produced at Rodderup, from Electricity and Water Power, about 600 cu.ft. per minute at 80 lbs pressure in the mine.

## **NENTHEAD MINES**

### **JULY 1942**

NENTSBURY MINE. The position re: Nentsbury is unchanged.

There is no improvement, and with the small supply of labour, we are unable to do any development work. All available labour is employed to meet the costs of working. No assistance has been given us by the Government, and the labour position shows no sign of improvement.

MILL. In good repair and running order.

RODDERUP MINE. Previous reports have referred to the faults which passed through the Flats, and dislocated the strata, and also cut out the rich ore in the top 5ft. to 6ft. of the Limestone. We persevered as long as we were able with the limited amount of labour available. To maintain the mine and try to meet the cost of working, I instructed the foreman to remove parts of good pillars left last year when in good ore, and thus endeavour to increase the output. This will be done during August.

MILL. In good order.

SALES OF ORE. Lead. We despatched the remainder of the Potters Ore, which was already in kegs for Messrs. Morris Ashby Ltd, during July. This clears us of stocking the ore, and the material has all been paid for. Monthly quantities are being sent to the British Pyros White Lead Co. Ltd, and payment is received monthly. The balance of the Lead Ore is sent to Messrs. Walkers Parker & Co., Newcastle.

Witherite. Messrs. Smith and Walton, Ltd., Haltwhistle, have collected some of the Witherite Concentrates ordered by them, and will take the balance when the Government release a mill for finely grinding the material for them.

Fluor Spar. Small quantities of this continue to be sold as produced.

Gravel. Continue monthly.

GENERAL. Owing to a breakdown in my health, caused by the strain of working long hours and the present difficult conditions: re: labour, poorness of the mines, and Government departments, I was ordered a complete rest, after consulting three doctors. I was therefore away from July 12th to July 31st.

Rampgill. The Government requisitioned Rampgill Building during July, and are now preparing foundations for a new plant.

No settlement has been reached. I requested Mr. Hallett to attend here and consult with me, and I have also seen Mr. Forster Brown, of Messrs. Forster Brown & Rees, the mineral agents for the Admiralty, and consulted Messrs. Blackburn & Main, the Co.'s solicitors. We are doing all we can to protect the Co.'s interests and secure an honest deal for the Company. It is very difficult, the Government having all the power.

N e n t s b u r y      M i n e.  
 @@@@@@@@@@@@@@@@@@      @@@@@@@@@@

Development Footage: Nil.

H. Kielty & Partners.

186 $\frac{3}{4}$  Days Worked.

Vein.

|               |    | L  | H   | S.F. | S.M.   | W.      | C.F.  | C.M.    | )                |
|---------------|----|----|-----|------|--------|---------|-------|---------|------------------|
| Sincay String | N. | 7  | x 9 | - 63 | - 5.35 | x 6     | - 378 | - 10.70 | )                |
| "             | "  | S. | 14  | x 8  | - 112  | - 10.40 | x 6   | - 672   | - 19.03 )        |
| " (Stope)     | "  | N. | 12  | x 8  | - 96   | - 8.92  | x 6   | - 576   | - 16.31 )        |
| X Liverick    | "  | N. | 12  | x 9  | - 108  | - 10.03 | x 6   | - 648   | - 18.29 )        |
| x "           | "  | E. | 13  | x 5  | - 65   | - 6.04  | x 6   | - 390   | - 11.04 ) @ Days |
| x "           | "  | E. | 15  | x 12 | - 180  | - 16.72 | x 6   | - 1080  | - 30.58 ) Wages  |
| "             | "  |    | 20  | x 7  | - 140  | - 13.00 | x 8   | - 1120  | - 31.71 )        |
| "             | "  |    | 11  | x 12 | - 132  | - 12.26 | x 6   | - 792   | - 22.43 )        |
| (x - Drives)  |    |    |     |      |        |         |       | 5656    | - 160.09 )       |

Tonnage to Mill:- 334 Tons.

Wages Paid:- £108. 1. 3.

Cost per Cu.M.:- 13s/6d.

R o d d e r u p      M i n e.  
 @@@@@@@@@@@@@@@@@@      @@@@@@@@@@

Development Footage:- Nil.

West Flats.

J. Johnston & Partners.

196 Days Worked.

|                 |  | L  | W    | S.F.  | S.M.    | H.   | C.F.   | C.M.    | )          |
|-----------------|--|----|------|-------|---------|------|--------|---------|------------|
| No.5 Bottom     |  | 5  | x 16 | - 80  | - 7.43  | x 15 | - 1200 | - 33.98 | )          |
| " " (Rt.)       |  | 8  | x 12 | - 96  | - 8.92  | x 10 | - 960  | - 27.18 | )          |
| " 4 Top N.W.    |  | 10 | x 8  | - 80  | - 7.43  | x 6  | - 480  | - 13.59 | )          |
| " " " W.        |  | 11 | x 6  | - 66  | - 6.13  | x 8  | - 528  | - 14.95 | )          |
| " " " W.        |  | 16 | x 8  | - 128 | - 11.89 | x 8  | - 1024 | - 28.99 | ) @ Days   |
| " " " S.W.      |  | 11 | x 8  | - 88  | - 8.18  | x 8  | - 704  | - 19.93 | ) Wages.   |
| " 2 Bottom (Rt) |  | 14 | x 8  | - 112 | - 10.40 | x 8  | - 896  | - 25.37 | )          |
| " " to vein.    |  | 16 | x 8  | - 128 | - 11.89 | x 8  | - 1024 | - 28.99 | )          |
|                 |  |    |      |       |         |      |        | 6816    | - 192.98 ) |

Tonnage to Mill:- 519 Tons

Wages paid:- £115. -. 6.

Cost per Cu.M.:- 11s/5d.

# MINE STATISTICS

July

1942

|           | Tons of Ore Mined. |      |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |       | Days Worked. |         |       |           | Tons per Miner's Day |       |        | Cubic Metres per Miner's Day |       |        | Wages paid per Miner's Day |         |           | Wages paid per Underground Man |       |           | Wages paid per Cubic Metre |           | No. of Drills Working | Dynamite |      |         |      |       |       |
|-----------|--------------------|------|-------|------------------|---------|-------|----------------------|---------|-------|--------------|---------|-------|-----------|----------------------|-------|--------|------------------------------|-------|--------|----------------------------|---------|-----------|--------------------------------|-------|-----------|----------------------------|-----------|-----------------------|----------|------|---------|------|-------|-------|
|           | Headings.          | Dev. | Total | In Ore           | In Dead | Total | In Ore               | In Dead | Total | Miners       |         |       | Labourers |                      |       | In Ore | In Dead                      | Total | In Ore | In Dead                    | Total   | Headings. | Dev.                           | Total | Headings. | Total                      | Headings. |                       | Total    | lbs. | per ton |      |       |       |
|           |                    |      |       |                  |         |       |                      |         |       | In Ore       | In Dead | Total | In Ore    | In Dead              | Total |        |                              |       |        |                            |         |           |                                |       |           |                            |           |                       |          |      |         | Bar- | Wages | gains |
|           |                    |      |       |                  |         |       |                      |         |       |              |         |       |           |                      |       |        |                              |       |        |                            |         |           |                                |       |           |                            |           |                       |          |      |         |      |       |       |
| Nentsbury | 334                | -    | 334   | 160              | 208     | -     | 208                  | 187     | -     | 237          | -       | 237   | -         | 237                  | -     | 237    | 1.78                         | 1.78  | 0.85   | 0.85                       | 117     | -         | 117                            | 10/10 | 10/10     | 16 1/5                     | 16 1/5    | 7/9                   | 3        | 290  | 0.87    |      |       |       |
| 6 Mos Av  | 359                | -    | 359   | 121              | 296     | -     | 296                  | 175     | -     | 229          | -       | 229   | -         | 229                  | -     | 229    | 2.04                         | 2.04  | 0.68   | 0.68                       | 117 1/2 | -         | 117 1/2                        | 11/05 | 11/05     | 21/85                      | 21/85     | 7/12                  | 3        | 223  | 0.53    |      |       |       |
| 7 Mos Av  | 355                | -    | 355   | 126              | 284     | -     | 284                  | 177     | -     | 230          | -       | 230   | -         | 230                  | -     | 230    | 2.02                         | 2.02  | 0.70   | 0.70                       | 117     | -         | 117                            | 11/7  | 11/7      | 20/105                     | 20/105    | 7/13                  | 3        | 252  | 0.66    |      |       |       |
| Rodderup  | 519                | -    | 519   | 193              | 274     | -     | 274                  | 196     | -     | 223          | -       | 223   | -         | 223                  | -     | 223    | 2.65                         | 2.65  | 1.00   | 1.00                       | 119     | -         | 119                            | 13/7  | 13/7      | 13/7                       | 13/7      | 3                     | 536      | 1.03 |         |      |       |       |
| 6 Mos Av  | 483                | -    | 483   | 186              | 276     | -     | 276                  | 196     | -     | 227          | -       | 227   | -         | 227                  | -     | 227    | 2.38                         | 2.38  | 0.89   | 0.89                       | 117     | -         | 117                            | 11/7  | 11/7      | 16/9                       | 16/9      | 5/8                   | 3        | 459  | 1.02    |      |       |       |
| 7 Mos Av  | 488                | -    | 488   | 187              | 276     | -     | 276                  | 196     | -     | 226          | -       | 226   | -         | 226                  | -     | 226    | 2.42                         | 2.42  | 0.90   | 0.90                       | 117     | -         | 117                            | 11/7  | 11/7      | 15/5                       | 15/5      | 3                     | 470      | 1.02 |         |      |       |       |

## COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱..... Rodderup .....✱

Nentsbury      Tons in Dead      Rodderup      Tons in Dead

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |     |
|-------------|-----|
| ...         | ... |
| ...Mos. Av. | ... |
| ...Mos. Av. | ... |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 107          | 26/6          | 234          | 13/8          |
| February  | 161          | 16/15         | 189          | 14/5          |
| March     | 91           | 28/10         | 160          | 16/-          |
| April     | 102          | 23/1          | 144          | 18/4          |
| May       | 141          | 16/8          | 114          | 20/10         |
| June      | 129          | 18/11 1/2     | 207          | 11/3          |
| July      | 160          | 16/1 1/2      | 193          | 13/7          |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report of the Nenthead Mines August 1942

### REPORT OF THE NENTHEAD MINES

AUGUST 1942

|                     | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u>    |
|---------------------|-------------------|------------------|------------------|-------------------|
| Ore Mined           | 256 Tons          | Dismantling      | 365 Tons         | 621 Tons          |
| " Milled            | 256 ) "           | by the Minis     |                  |                   |
| " " ex Dumps        | 34 ) "            | try of Supply    | 365 "            | 621 ) "           |
| Pb Concs. produced  | 15.95 "           | at Rampgill      |                  | 34 ) "            |
| Fluor Spar ex Dumps | 13.09 "           | Mill except      | 31.75 "          | 47.70 "           |
|                     |                   | the engines      |                  |                   |
|                     |                   | continues.       | -                | 13.09 "           |
| % Galena recovered  | 6.23%             |                  | 8.70%            | N. 6.23% R. 8.70% |
| % Fluor Spar "      | 38.20%            |                  | -                | 38.20% -          |
| Hours Worked        | 77 hrs.           |                  | 75 hrs.          | 78 hrs 75 hrs     |
| Tons per hour       | 3.45 Tons         |                  | 4.87 Tons        | 3.45 4.87 Tons    |

#### STOCKS.

| <del>XXXXXXXX</del>                         | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|---------------------------------------------|-------------------|------------------|------------------|------------------|----------------|
| Crude Ore                                   | Nil.              | Nil.             | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende-Witherite                            | 50 Tons           | Nil.             | 150 Tons         | Nil.             | 200 "          |
|                                             |                   |                  | (about 28% Zn.)  |                  |                |
| Galena at Nentsbury, including Potters Ore, |                   |                  | 13 Tons.         |                  |                |
| " " Rodderup, " " "                         |                   |                  | 13.688 Tons.     |                  |                |
| Witherite Concentrates despatched,          |                   |                  | Nil.             |                  |                |
| " " in stock,                               |                   |                  | 74.30 Tons.      |                  |                |
| Fluor Spar sold                             |                   |                  | 12.25 Tons       |                  |                |
| " " in stock                                |                   |                  | 13.00 "          |                  |                |

FUEL OIL consumed at Nentsbury, 1.5 Tons  
" " " " Rodderup, Nil.

COMPRESSED AIR produced at Nenthead from Water, approx. 600 cu.ft. per minute. Pressure from 70 to 80 lbs per square inch.

COMPRESSED AIR produced at Rodderup from Electricity and Water power, about 600 cu.ft. per minute at 80 to 85 lbs pressure at the face.

## **NENTHEAD MINES**

### **AUGUST 1942**

NENTSBURY MINE. The position re: Nentsbury is unchanged. The number of miners employed now is about 50% lower than a year ago. It is not possible to procure more unless Italian prisoner labour is employed. We have asked the Government Department concerned to supply particulars. We dare not close the mine as if we do, the Government may requisition it, and the Co. lose all rights and get little or nothing for the plant.

MILL. In good order.

RODDERUP MINE. Conditions similar. The outlook now indicates that some improvement may be expected during September. Here also the labour position is acute. The Government have asked for an increase in output, and have offered Italian prison-labour. This matter is under consideration. They have also suggested that diamond drill bore-holes should be put out in various places to prove if there are other veins or Flats carrying payable ores. I have asked for written conditions and agreed in principle for this to be done. The V.M. Co. will supply the Compressed Air and the Government will bear the cost of the drillers and the maintenance of the drill.

MILL. In good order.

SALES OF ORE. Lead. Sales of Potters Ore have been made monthly to the Pyros Co. London, and periodically sales of lower grade ore to Messrs. Walkers Parker & Co., Newcastle, while next month we expect to sell some Potters Ore of 5/15 mm. size to Messrs, Morris Ashby Ltd., London.

Witherite. Messrs. Smith & Walton have not been in a position to remove the balance of the Concentrates purchased. The Government have commandeered the grinding plant to crush fertilisers. Later they expect the crushing plant will be released.

Flour Spar. Small quantities sold when available.

Gravel & Stone. Small monthly sales are made, the greatest difficulty re: this, is transport.

GENERAL. The Non-Ferrous Mineral Development Control has continued to dismantle Rampgill., and up to the end of August no terms or conditions, have been settled. A quantity of the Mill material has been removed and the building structure is being altered to suit the Control's requirements. Mr. Hallett in London, Mr. McPhail, senior partner of Blackburn Main, the Co.'s solicitors, and I have been in close consultation, and are lodging a substantial claim on behalf of the Company.



AUGUST 14- 1942.

N e n t s b u r y      M i n e.  
 @@@@@@@@@@@@@@@@@@      @@@@@@@@@@

Development Footage:      Nil.

H. Kielty & Partners.

129 Days Worked.

Vein.

|               | L      | H | S.F. | S.M. | W.        | C.F. | S.M.        | )                |
|---------------|--------|---|------|------|-----------|------|-------------|------------------|
| Dupont String | 30 x 4 | - | 120  | -    | 11.15 x 6 | -    | 720         | - 20.39 )        |
| Liverick "    | 15 x 6 | - | 90   | -    | 8.36 x 6  | -    | 540         | - 15.29 )        |
| " " DriveN.   | 8 x 12 | - | 96   | -    | 8.92 x 6  | -    | 576         | - 16.31 ) @ Days |
| " " " E.      | 23 x 4 | - | 92   | -    | 8.54 x 6  | -    | 552         | - 15.63 ) Wages. |
| " " " E.      | 9 x 7  | - | 63   | -    | 5.85 x 5  | -    | 315         | - 8.22 )         |
|               |        |   |      |      |           |      | <u>2703</u> | <u>-76.54</u>    |

Tonnage to Mill:- 256

Wages Paid: £77: 17: 11.

Cost per Cu.M.:- 20/4.

R o d d e r u p      M i n e.  
 @@@@@@@@@@@@@@@@@@      @@@@@@@@@@

Jos. Johnston & Partners.

184 Days Worked.

Development Footage: Nil.

West Flats.

|                | L       | W | S.F. | S.M. | H.        | C.F. | C.M.        | )                      |
|----------------|---------|---|------|------|-----------|------|-------------|------------------------|
| No.5 Bottom    | 5 x 16  | - | 80   | -    | 7.43 x 15 | -    | 1200        | - 33.98 )              |
| " 4 To fissure | 12 x 12 | - | 144  | -    | 13.38 x 8 | -    | 1152        | - 32.62 )              |
| " " S.W.       | 7 x 10  | - | 70   | -    | 6.50 x 8  | -    | 560         | - 15.85 )              |
| " " Pillars    | 27 x 10 | - | 270  | -    | 25.08 x 5 | -    | 1350        | - 38.22 ) @ Days Wages |
| " 2 To vein    | 7 x 8   | - | 56   | -    | 5.20 x 8  | -    | 448         | - 12.69 )              |
| " " " "        | 25 x 13 | - | 325  | -    | 30.19 x 7 | -    | 2275        | - 64.42 )              |
|                |         |   |      |      |           |      | <u>6985</u> | <u>-127.78</u>         |

Tonnage to Mill:- 365

Wages Paid £108. 5. 9.

Cost per Cu.M.:- 10/11.

| MINE STATISTICS    |     |       |                  |     |          |                      |     |          |              |     |          |           |   |      |                      |     |        |                              |          | 1942. |                     |      |     |                            |     |          |                                |       |                                |                            |          |     |                       |                    |          |  |
|--------------------|-----|-------|------------------|-----|----------|----------------------|-----|----------|--------------|-----|----------|-----------|---|------|----------------------|-----|--------|------------------------------|----------|-------|---------------------|------|-----|----------------------------|-----|----------|--------------------------------|-------|--------------------------------|----------------------------|----------|-----|-----------------------|--------------------|----------|--|
| August             |     |       |                  |     |          |                      |     |          |              |     |          |           |   |      |                      |     |        |                              |          |       |                     |      |     |                            |     |          |                                |       |                                |                            |          |     |                       |                    |          |  |
| Tons of Ore Mined. |     |       | Cubic Metres Cut |     |          | Tons per Cubic Metre |     |          | Days Worked. |     |          |           |   |      | Tons per Miner's Day |     |        | Cubic Metres per Miner's Day |          |       | Per Underground Man |      |     | Wages paid per Miner's Day |     |          | Wages paid per Underground Man |       |                                | Wages paid per Cubic Metre |          |     | No. of Drills Working |                    | Dynamite |  |
|                    |     |       |                  |     |          |                      |     |          | Miners       |     |          | Labourers |   |      |                      |     |        |                              |          |       |                     |      |     |                            |     |          |                                |       |                                |                            |          |     |                       |                    |          |  |
| Headings.          |     | Total | In Ore           |     | In Deads | In Ore               |     | In Deads | In Ore       |     | In Deads | Wages.    |   | Bar- | Total                |     | In Ore |                              | In Deads | Total |                     | Tons |     | Cubic Metres               |     | Headings |                                | Total | Wages paid per Underground Man |                            | Headings |     | Total                 | Wages paid per ton |          |  |
| Nentsbury          | 250 | -     | 250              | 77  | -        | 77                   | 352 | -        | 352          | 136 | -        | 52        | - | 188  | -                    | 188 | 188    | 188                          | 188      | 188   | 188                 | 188  | 188 | 188                        | 188 | 188      | 188                            | 188   | 188                            | 188                        | 188      | 188 | 188                   | 188                | 188      |  |
| 7 Mos Av           | 355 | -     | 355              | 120 | -        | 120                  | 284 | -        | 284          | 177 | -        | 53        | - | 230  | -                    | 230 | 202    | 202                          | 202      | 202   | 202                 | 202  | 202 | 202                        | 202 | 202      | 202                            | 202   | 202                            | 202                        | 202      | 202 | 202                   | 202                | 202      |  |
| 8 Mos Av           | 343 | -     | 343              | 120 | -        | 120                  | 240 | -        | 240          | 172 | -        | 53        | - | 225  | -                    | 225 | 200    | 200                          | 200      | 200   | 200                 | 200  | 200 | 200                        | 200 | 200      | 200                            | 200   | 200                            | 200                        | 200      | 200 | 200                   | 200                | 200      |  |
| Rodderup           | 365 | -     | 365              | 197 | -        | 197                  | 185 | -        | 185          | 184 | -        | 42        | - | 210  | -                    | 210 | 200    | 200                          | 200      | 200   | 200                 | 200  | 200 | 200                        | 200 | 200      | 200                            | 200   | 200                            | 200                        | 200      | 200 | 200                   | 200                | 200      |  |
| 7 Mos Av           | 488 | -     | 488              | 187 | -        | 187                  | 270 | -        | 270          | 146 | -        | 30        | - | 220  | -                    | 220 | 242    | 242                          | 242      | 242   | 242                 | 242  | 242 | 242                        | 242 | 242      | 242                            | 242   | 242                            | 242                        | 242      | 242 | 242                   | 242                | 242      |  |
| 8 Mos Av           | 473 | -     | 473              | 188 | -        | 188                  | 265 | -        | 265          | 145 | -        | 31        | - | 210  | -                    | 210 | 230    | 230                          | 230      | 230   | 230                 | 230  | 230 | 230                        | 230 | 230      | 230                            | 230   | 230                            | 230                        | 230      | 230 | 230                   | 230                | 230      |  |

# COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱ Rodderup .....✱

Nentsbury      ....      Tons in Deaths      ....  
 Rodderup      ....      Tons in Deaths      ....

Wages paid per Cubic Metre in Headings, as suggested in your letter of 3rd June, 1932.

Nentsbury

|            |  |
|------------|--|
| ..Mos. Av. |  |
| ..Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 107          | 20 1/2        | 254          | 13 1/8        |
| February  | 101          | 10 1 1/2      | 189          | 14 1/5        |
| March     | 91           | 28 1/10       | 100          | 10 1/2        |
| April     | 102          | 23 1/11       | 144          | 18 1/4        |
| May       | 141          | 10 1/8        | 114          | 20 1/10       |
| June      | 129          | 18 1 1/2      | 207          | 11 1/3        |
| July      | 100          | 10 1 1/2      | 143          | 13 1/7        |
| August    | 77           | 20 1/2        | 107          | 13 1/8        |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

# Report of the Nenthead Mines September 1842

## REPORT OF THE NENTHEAD MINES.

SEPTEMBER 1842

|               | <u>Nentsbury.</u> | <u>Rampgill.</u>                                                                                                                                                                                      | <u>Rodderup.</u> | <u>Totals.</u>  |
|---------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|
| Ore Mined     | 270 Tons          | This is in the hands of the Non Ferrous Minerals Control, except the Engines & Engine Houses No settlement has been reached with the Control. Mr. Hallett, Mr. McPhail and I have the matter in hand. | 440 Tons         | 710 Tons        |
| Ore Milled    | 270 "             |                                                                                                                                                                                                       | 440 "            | 710 "           |
| Concs. Prdcd. | 14.30 "           |                                                                                                                                                                                                       | 38.95 "          | 53.25 "         |
| % Galena      | 5.29%             |                                                                                                                                                                                                       | 8.85%            | 5.29% 8.85%     |
| Hours worked  | 72 hrs.           |                                                                                                                                                                                                       | 94 hrs.          | 72 hrs. 94 hrs. |
| Tons per hour | 3.75 Tons         |                                                                                                                                                                                                       | 4.90 Tons        | 3.75 4.90 Tons  |

### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>         | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|--------------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.                     | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | 50 Tons           | Nil.             | 150 Tons (about 28% Zn.) | Nil.             | 200 "          |

Galena at Nentsbury, including Potters Ore, 7.428 Tons.  
" " Rodderup, " " " 12.331 "

(Potters Ore is included in the above, and will be included in future.  
It is sold both as Potters & Bulk Ore.)

Witherite Concentrates in stock..... 74.3 Tons  
Fluor Spar sold..... 24.3 "  
" " in stock..... Nil.

Fuel Oil consumed at Nentsbury, 1.50 Tons.  
" " " " Rodderup, Nil.

COMPRESSED AIR produced at Nenthead from Water Power, about 600 cu.ft. per minute at 70-80 lbs pressure per square inch in the mine.

COMPRESSED AIR produced at Rodderup from Electric Power and Water Power, about 600 cu.ft. per minute at 80 lbs to 85lbs per square inch pressure at the face.

## **NENTHEAD MINES SEPTEMBER 1942**

NENTSBURY MINE. As indicated in last month's report Government, through the Non-Ferrous Ores Committee, took over the miners for two weeks to carry out certain work in the mine in which they were interested. For the use of the Foreman, miners, and power etc. etc., the Government paid us in advance the sum of £250. The mill was operated during the time the miners were working for the Government, crushing and dressing Fluor Spar from Rodderup dumps. The output of saleable Fluor Spar produced was 64 Tons. Lead Concentrates produced equals 8.25 Tons.

The nett value of the Fluor Spar was £81., Lead Ore £132, plus Government £250 for the two weeks, enabled us to meet all costs.

MILL. In good repair.

RODDERUP MINE. The grade of the ore remained good, although not quite as good as during October. There is a slight falling off in grade, particularly in two Flats. The general outlook is fair.

Tonnage sent to the Mill for November amounted to 801 Tons compared with 840 Tons in October. Concentrates produced in November 96.69 Tons compared with 105.15 Tons in October, and the percentage 12.07 compared with 12.42.

It must be noted that November was a short month, 24 working days only against 27 in October. Labour difficulty is acute and wages continue to rise.

MILL. In good repair.

SALES OF LEAD ORE. Carried out monthly and accounts paid promptly.

SALES OF GRAVEL. Sales of Gravel and Stones were renewed during the month.

SALE OF FLUOR SPAR. We have disposed of all we have so far produced and can sell as much as we can produce. The Mill at Nentsbury is used for this purpose when short of Lead Ore or for any other cause. The price obtained at Alston Station is 28s/6d per ton.

GENERAL. Conditions generally are unchanged. The average monthly profit will probably work out at £250, which considering the prevailing conditions of high cost, shortage of labour, increased cost of labour and other difficulties is not unsatisfactory.

SEPTEMBER 1942.

N e n t s b u r y      M i n e .

Development Footage:- Nil.

H. Kielty & Partners.

129 Days Worked.

Vein.

|                   | L  | H    | S.F.  | S.M.    | H   | C.F.        | C.M.            |          |
|-------------------|----|------|-------|---------|-----|-------------|-----------------|----------|
| Liverick N. Drive | 13 | x 12 | - 156 | - 14.49 | x 6 | - 936       | - 26.50         | )        |
| "      String     | 22 | x 6  | - 132 | - 12.26 | x 6 | - 792       | - 22.42         | ) @ Days |
| Dupont      "     | 22 | x 14 | - 308 | - 28.61 | x 6 | - 1848      | - 52.33         | ) Wages. |
|                   |    |      |       |         |     | <u>3576</u> | - <u>101.25</u> | )        |

Tonnage to Mill:- 270

Wages Paid: £73: 18: 9.

Cost per Cu.M.:- 14s/8d.

R o d d e r u p      M i n e .

Development Footage:- Nil.

J. Johnston & Partners.

197 Days Worked.

Flat.

|                  | L  | W    | S.F.  | S.M.    | H.   | C.F.        | C.M.            |          |
|------------------|----|------|-------|---------|------|-------------|-----------------|----------|
| No.5 Bottom      | 4  | x 17 | - 68  | - 6.32  | x 15 | - 1020      | - 28.38         | )        |
| "      4 Top     | 12 | x 7  | - 84  | - 7.80  | x 8  | - 672       | - 19.02         | )        |
| "      " S.W.    | 8  | x 10 | - 80  | - 7.43  | x 8  | - 640       | - 18.12         | ) @ Days |
| "      " Pillar  | 14 | x 16 | - 224 | - 20.81 | x 5  | - 1120      | - 31.71         | ) Wages  |
| "      "      "  | 7  | x 8  | - 56  | - 5.20  | x 5  | - 280       | - 7.93          | )        |
| "      2 to vein | 23 | x 8  | - 184 | - 17.09 | x 8  | - 1472      | - 41.70         | )        |
|                  |    |      |       |         |      | <u>5204</u> | - <u>147.36</u> | )        |

Tonnage to Mill:- 440.

Wages Paid: £114: 18: 9.

Cost per Cu.M.:- 15/7

MINE STATISTICS

September

1942.

|            | Tons of Ore Mined. |      |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |       | Days Worked. |         |           |         |                      |                            | Dynamite |                                |                            |                       |              |      |     |   |     |      |      |       |      |    |     |      |
|------------|--------------------|------|-------|------------------|---------|-------|----------------------|---------|-------|--------------|---------|-----------|---------|----------------------|----------------------------|----------|--------------------------------|----------------------------|-----------------------|--------------|------|-----|---|-----|------|------|-------|------|----|-----|------|
|            | Headings.          | Dev. | Total | In Ore           | In Dead | Total | In Ore               | In Dead | Total | Miners       |         | Labourers |         | Per Underground Min. | Wages paid per Miner's Day |          | Wages paid per Underground Man | Wages paid per Cubic Metre | No. of Drills Working | lbs. per ton |      |     |   |     |      |      |       |      |    |     |      |
|            |                    |      |       |                  |         |       |                      |         |       | In Ore       | In Dead | In Ore    | In Dead |                      |                            |          |                                |                            |                       |              |      |     |   |     |      |      |       |      |    |     |      |
| Nentsbury  | 270                | -    | 270   | 101              | -       | 101   | 2.67                 | -       | 2.67  | 129          | -       | 49        | -       | 178                  | -                          | 178      | 2.09                           | 0.78                       | 0.78                  | 1.51         | 0.56 | 115 | - | 115 | 10.9 | 10.9 | 19.10 | 7.1  | 3  | 205 | 0.76 |
| 8 Mos. Av. | 343                | -    | 343   | 120              | -       | 120   | 2.90                 | -       | 2.90  | 172          | -       | 53        | -       | 225                  | -                          | 225      | 2.00                           | 0.68                       | 0.68                  | 1.51         | 0.53 | 117 | - | 117 | 11.1 | 11.1 | 21.10 | 7.4  | 3  | 204 | 0.67 |
| 9 Mos. Av. | 335                | -    | 335   | 118              | -       | 118   | 2.87                 | -       | 2.87  | 167          | -       | 53        | -       | 220                  | -                          | 220      | 2.01                           | 0.69                       | 0.69                  | 1.51         | 0.53 | 117 | - | 117 | 11.1 | 11.1 | 21.14 | 7.4  | 3  | 204 | 0.68 |
| Rodderup   | 440                | -    | 440   | 147              | -       | 147   | 3.00                 | -       | 3.00  | 197          | -       | 49        | -       | 246                  | -                          | 246      | 2.23                           | 0.74                       | 0.74                  | 1.79         | 0.60 | 118 | - | 118 | 11.0 | 11.0 | 19.9  | 4    | 4  | 346 | 0.79 |
| 8 Mos. Av. | 473                | -    | 473   | 188              | -       | 188   | 2.65                 | -       | 2.65  | 195          | -       | 51        | -       | 216                  | -                          | 216      | 2.36                           | 0.92                       | 0.92                  | 1.98         | 0.79 | 117 | - | 117 | 11.7 | 11.7 | 19.2  | 5.9  | 3  | 407 | 1.04 |
| 9 Mos. Av. | 469                | -    | 469   | 184              | -       | 184   | 2.69                 | -       | 2.69  | 195          | -       | 53        | -       | 228                  | -                          | 228      | 2.35                           | 0.90                       | 0.90                  | 1.90         | 0.77 | 117 | - | 117 | 11.7 | 11.7 | 19.8  | 5.10 | 35 | 454 | 1.01 |

COMPARATIVE STATEMENT.

\*.....Nentsbury.....\*.....Rodderup.....\*

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 107          | 26/10         | 234          | 13/8          |
| February  | 191          | 16/14         | 189          | 14/5          |
| March     | 91           | 28/10         | 160          | 16/-          |
| April     | 102          | 23/1          | 144          | 18/4          |
| May       | 141          | 16/8          | 114          | 20/10         |
| June      | 129          | 18/11 1/2     | 207          | 11/3          |
| July      | 100          | 16/14         | 193          | 13/7          |
| August    | 77           | 26/-          | 197          | 13/12         |
| September | 101          | 19/10         | 147          | 19/9          |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Nentsbury      ...      Tons in Dead      ...

Rodderup      ...      Tons in Dead      ...

## Report of the Nenthead Mines October 1942

### REPORT ON THE NENTHEAD MINES.

OCTOBER 1942

|                 | <u>Nentsbury.</u> | <u>Rampgill.</u>                                                                                                          | <u>Rodderup.</u> | <u>Totals.</u>       |
|-----------------|-------------------|---------------------------------------------------------------------------------------------------------------------------|------------------|----------------------|
| Ore Mined       | 270 Tons          | This building is now in the hands of the Non-Ferrous Mineral Development Control, except the Engine House and Coal Cells. | 407 Tons         | 677 Tons             |
| Ore Milled      | 270 "             |                                                                                                                           | 407 "            | 677 "                |
| Concs. prdcd.   | 13.40 "           |                                                                                                                           | 37.25 "          | 50.65 "              |
| Galena recovery | 4.96%             |                                                                                                                           | 9.15%            | N. 4.96% R. 9.15%    |
| Hours worked    | 72 hrs.           |                                                                                                                           | 84 hrs.          | 72 hrs 94 hrs.       |
| Tons per hour   | 3.75 Tons         |                                                                                                                           | 4.84 Tons        | 3.75 Tons 4.84 Tons. |

#### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | 50 Tons           | Nil.             | 150 Tons         | Nil.             | 200 "          |

Galena at Nentsbury, including Potters Ore, 20.828 Tons.  
" " Rodderup, " " 39.581 "

Witherite Concentrates in Stock, 74.30 Tons.

Fluor Spar Sold..... Nil.  
" " in stock..... Nil.

Fuel Oil consumed at Nentsbury, 1.50 Tons.  
" " " " Rodderup, Nil.

Compressed Air produced at Nenthead, about 600 cu.ft. per minute at 75 lbs. to 80 lbs pressure at face.  
All produced from Water power.

Compressed Air produced at Rodderup, from Electric power and Water power, approx. 600 cu.ft. per minute at from 80 to 85 lbs per square inch pressure at the face.



## NENTHEAD MINES OCTOBER 1942

NENTSBURY MINE. The position underground is unchanged. Owing to the scarcity of labour, the mine is carrying a heavy burden of Standing Charges, all of which rest on the low output. The alternative is to close the mine, and this would mean that in all probability the Government would take it over and pay little, if anything, for the plant and machinery. The position is a very difficult one. Fortunately, this year we are reaping the advantage of the sale of Zinc Residues from the Mixed Concentrates delivered to Stockton in 1938 & 1939. The revenue from these should go to meet the loss of working the mine.

MILL. In good general order.

RODDERUP MINE. The month's results from Rodderup clearly indicate that the position there is unchanged. Labour is scarce and the output small. No development has been done for a long time. Consequently, we are entirely dependent on the grade of ore mined in the Flats from month to month. At present owing to the small amount of labour, work is confined to mining pillars in the Flats where the ore is of good grade and where it is possible to remove the pillars without damaging the mine. Arrangements have definitely been made with the Development Control to carry out a plan of diamond drilling next month. The Government will bear most of the expense the V.M. Co. supplying power and possibly pay a nominal price per foot drilled and any excess over the Government allowance for lodgings. Diamond drilling should prove quickly if there is payable ore in the Flats nearer the West Cross-course, and where tramming costs would be considerably reduced. More particulars will be available next month.

MILL. In good order.

SALES OF ORES. Lead. As usual.

Witherite. None delivered, but if the Govt., do not release the Grinding Mill, the buyers will remove the stock ordered and pay for it.

Stone & Gravel. Owing to rail congestion at Carlisle, deliveries were suspended for some time.

GENERAL. No settlement has been reached re Rampgill Building and the Dumps. Sir Wm. Larke & Mr. Jackson, the Controller and Consulting Engineer respectively, called during the month.

Sir William assured me the Co. would get a "Square deal" re: the dumps and the requisitioning of the Building. He also stated that the Govt., could not be hurried by either he or I, a full report of everything is sent, almost weekly and oftener to Messrs. Blackburn & Main, the Co.'s solicitors, and to Mr. Hallett, in London, with copies of all correspondence.



OCTOBER 1942.

N e n t s b u r y      M i n e.  
 @@@@@@@@@@@@@@@@@@      @@@@@@@@@@

Development Footage: Nil.

M. Kielty & Partners.

136½ Days Worked.

Vein.

|                   | L       | H | S.F. | S.M. | W.    | C.F. | C.M. ) |             |                        |
|-------------------|---------|---|------|------|-------|------|--------|-------------|------------------------|
| Dupont String     | 11 x 18 | - | 198  | -    | 18.39 | x 6  | -      | 1188        | - 33.64 )              |
| Liverick Drive E. | 15 x 14 | - | 210  | -    | 19.51 | x 6  | -      | 1260        | - 35.68 ) @ Days Wages |
| " " N.            | 9 x 12  | - | 108  | -    | 10.03 | x 6  | -      | 648         | - 18.34 )              |
|                   |         |   |      |      |       |      |        | <u>3096</u> | - <u>87.66</u> )       |

Tonnage to Mill:- 270

Wages Paid:- £77. 16. 9.

Cost per Cu.M.:- 17s/8d.

R o d d e r u p      M i n e.  
 @@@@@@@@@@@@@@@@@@      @@@@@@@@@@

Development Footage: Nil.

W e s t   F l a t s

Jos. Johnston & Partners.

193 Days Worked.

Flat.

|              | L       | W | S&F. | S.M. | H.    | C.F. | C.M. ) |             |                        |
|--------------|---------|---|------|------|-------|------|--------|-------------|------------------------|
| No. 5 Bottom | 2 x 17  | - | 34   | -    | 3.16  | x 10 | -      | 316         | - 9.63 )               |
| " " Side     | 10 x 5  | - | 50   | -    | 4.64  | x 10 | -      | 500         | - 14.16 )              |
| " 4 Fissure  | 17 x 8  | - | 136  | -    | 12.63 | x 8  | -      | 1088        | - 30.81 )              |
| " 3 Pillar   | 7 x 8   | - | 56   | -    | 5.20  | x 5  | -      | 280         | - 7.93 )               |
| " " "        | 18 x 12 | - | 216  | -    | 20.07 | x 5  | -      | 1080        | - 30.58 ) @ Days Wages |
| " " "        | 8 x 8   | - | 64   | -    | 5.95  | x 5  | -      | 320         | - 9.06 )               |
| " " "        | 23 x 6  | - | 138  | -    | 12.82 | x 5  | -      | 690         | - 19.53 )              |
| " 2 To vein  | 8 x 8   | - | 64   | -    | 5.95  | x 8  | -      | 512         | - 14.50 )              |
| " " "        | 15 x 8  | - | 120  | -    | 11.15 | x 7  | -      | 840         | - 23.78 )              |
|              |         |   |      |      |       |      |        | <u>5650</u> | - <u>159.98</u> )      |

Tonnage to Mill:- 407

Wages Paid: £113. 6. 6.

Cost per Cu.M.:- 14s/2d.

# MINE STATISTICS

October 1942.

|  | Tons of Ore Mined. |  |  | Cubic Metres Cut |  |  | Tons per Cubic Metre |  |  | Days Worked |  |  |       |  |  | Tons per Miner's Day |  |  | Cubic Metres per Miner's Day |  |  | Per Underground Man |  |  | Wages paid per Underground Man |  |  | Wages paid per Cubic Metre |  | No. of Drills Working |       | Dynamite |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |        |  |  |         |  |  |       |  |  |
|--|--------------------|--|--|------------------|--|--|----------------------|--|--|-------------|--|--|-------|--|--|----------------------|--|--|------------------------------|--|--|---------------------|--|--|--------------------------------|--|--|----------------------------|--|-----------------------|-------|----------|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|--------|--|--|---------|--|--|-------|--|--|
|  | Headings.          |  |  | Total            |  |  | In Ore               |  |  | In Dead     |  |  | Total |  |  | In Ore               |  |  | In Dead                      |  |  | Total               |  |  | In Ore                         |  |  | In Dead                    |  |                       | Total |          |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  | In Ore |  |  | In Dead |  |  | Total |  |  |

## COMPARATIVE STATEMENT.

\*..... Nentsbury ..... Rodderup .....

Nentsbury      Tons in Dead      Rodderup      Tons in Dead

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 107          | 26/6          | 234          | 13/8          |
| February  | 161          | 16/1 1/2      | 189          | 14/5          |
| March     | 91           | 28/10         | 160          | 16/-          |
| April     | 102          | 23/1          | 144          | 18/4          |
| May       | 141          | 16/8          | 114          | 20/10         |
| June      | 129          | 18/11 1/2     | 207          | 11/3          |
| July      | 160          | 16/1 1/2      | 193          | 13/7          |
| August    | 47           | 26/-          | 197          | 15/6          |
| September | 101          | 19/10         | 147          | 19/9          |
| October   | 88           | 23/1          | 160          | 16/2          |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report of the Nenthead Mines November 1942

### REPORT ON THE NENTHEAD MINES.

NOVEMBER 1942

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u>   | <u>Rodderup.</u> | <u>Totals.</u>       |
|------------------|-------------------|--------------------|------------------|----------------------|
| Ore Mined        | 240 Tons          | Nothing to report. | 380 Tons         | 620 Tons             |
| Ore Milled       | 240 "             |                    | 380 "            | 620 "                |
| Concs. produced  | 15.0 "            |                    | 33.3 "           | 38.3 "               |
| Galena recovered | 6.25%             |                    | 8.76%            | N. 6.25% R. 8.76%    |
| Hours worked     | 64 hrs.           |                    | 75 hrs.          | 64 hrs 75 hrs.       |
| Tons per hour    | 3.75 Tons         |                    | 5.06 Tons        | 3.75 Tons 5.06 Tons. |

#### STOCKS.

|                                            | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|--------------------------------------------|-------------------|------------------|------------------|----------------|
| Crude Ore                                  | Nil.              | Nil.             | 2500 Tons        | 2500 Tons.     |
| Blende-Witherite                           | 50 Tons           | 150 Tons         | Nil.             | 200 "          |
| Galena at Nentsbury including Potters Ore, | 17.328 Tons       |                  |                  |                |
| " " Rodderup,                              | 29.431 "          |                  |                  |                |

All Witherite stock has been sold and despatched.

Fluor Spar sold 22.50 Tons. Stock, Nil.

Fuel Oil consumed at Nentsbury, 1.50 Tons.

Do. do. " " Rodderup, Nil.

COMPRESSED AIR produced at Nenthead, about 600 cu.ft., per minute at 75-80 lbs. pressure at face, from Water Power.

COMPRESSED AIR produced at Rodderup, about 700 cu.ft., per minute from Electric Power and Water Power, at from 80 to 85 lbs pressure per square inch at the face. The extra 100 cu.ft produced was to supply the Canadian Drillers with power for diamond-drilling.

## **NENTSBURY MINE NOVEMBER 1942**

NENTSBURY MINE. There has been no appreciable change in the position underground in Nentsbury Mine. With difficulty we have been able to retain the small amount of labour employed in the mine. Only three working places can be worked as only three rock-drill miners are employed. The Government require Lead and we are urged to produce as much as possible. This we are doing with difficulty.

MILL. In good order.

RODDERUP MINE. At Rodderup the position is similar to that in Nentsbury. Only three rock-drill miners are employed. The small amount of labour is employed, first, to break as much payable ore as possible, and, second, to transport it to the Mill. No development can be done owing to the scarcity of labour.

The Canadian drilling squad have diamond-drilled two holes from the X-cut put out in 1940/41 to cut the Flat area West of the Flats, where if good ore could be found, it would enable us to work that area from the Horse Level and reduce transport costs to a minimum. The first hole drilled was set out from near the bottom of the Tyne Bottom Limestone, at an angle upwards to pass through almost the full height of the Limestone. At 140 feet it passed through the limestone to the Plate. Traces of galena and blende were found. The second hole was set out to drill at a less angle and to the East of the first one. This hole was drilled for 200 ft. 6 inches, where it cut the Plate. Similar results were obtained.

The drill was then removed to the Flat area near the foot of the Incline on the North side of the Vein, where good ore seemed to be going down. This hole was set out to drill down at an angle of 5 degrees. At the end of the month, this had been put down to a depth of 40 ft. and passed through mineralised limestone for about the whole distance. At this point the strata are dipping West, and our object is to find out how far the mineralised zone extends and whether the ore is payable. For this work, the Company is paying the 8 men employed £1. per week, each, and 6s/6d each per week towards the cost of their food and lodging, and supplying compressed air for power to operate the drill. More detailed results will be given in the December report and the Annual Report.

MILL. In good order.

SALES OF ORES ETC.    Lead Ore.    Most of the ore produced is sold as Potters Ore to Messrs. Morris Ashby Ltd. and the British Pyros White Lead Co., Ltd., near London. The lower grade ore (slimes and inferior quality) is sold to Walkers Parker & Co., Ltd., Newcastle.

Witherite. All the Witherite ore sold, has now been despatched, including a parcel of low grade middlings.

Fluor Spar. A parcel of 22.5 Ton was sold.

Stones & Gravel. Congestion on the Railway prevented heavy sales of these materials. Just over 135 Tons was sold.

GENERAL. There is no change in the position re: Rampgill and the Government. We are awaiting replies to many letters, and in the meantime are keeping a record of what the Government is doing. The position is both difficult and confusing. Meanwhile we are trying to produce evidence respecting the ownership of the dumps, which the Government is questioning.

NOVEMBER 1942.

N e n t s b u r y      M i n e.  
 ○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○○

MINE STATISTICS.....November.....1912.

|  | Tons of Ore Mined. |      |       | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked. |          |           |          | Tons per Miner's Day |        | Per Underground Man |              | Wages paid per Miner's Day |      | Wages paid per Underground Man |          | Wages paid per Cubic Metre |          | Wages paid per ton of Ore |      | Dynamite |      |
|--|--------------------|------|-------|------------------|----------|-------|----------------------|----------|-------|--------------|----------|-----------|----------|----------------------|--------|---------------------|--------------|----------------------------|------|--------------------------------|----------|----------------------------|----------|---------------------------|------|----------|------|
|  | Headings.          | Dev. | Total | In Ore           | In Deads | Total | In Ore               | In Deads | Total | Miners       |          | Labourers |          | Total                | In Ore | Total               | Cubic Metres | Headings                   | Dev. | Total                          | Headings | Total                      | Headings | Total                     | lbs. | per ton  |      |
|  |                    |      |       |                  |          |       |                      |          |       | In Ore       | In Deads | In Ore    | In Deads |                      |        |                     |              |                            |      |                                |          |                            |          |                           |      |          | Bar- |

COMPARATIVE STATEMENT.

Nentsbury  
Rodderup

Tons in Deads  
Tons in Deads

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 107          | 26 1/2        | 234          | 13 1/5        |
| February  | 101          | 16 1/2        | 189          | 14 1/5        |
| March     | 91           | 28 1/2        | 100          | 10 -          |
| April     | 102          | 23 1/2        | 144          | 18 1/2        |
| May       | 141          | 16 1/2        | 114          | 20 1/2        |
| June      | 129          | 18 1/2        | 207          | 11 1/2        |
| July      | 100          | 16 1/2        | 193          | 13 1/2        |
| August    | 77           | 26 -          | 197          | 13 1/2        |
| September | 101          | 19 1/2        | 147          | 19 1/2        |
| October   | 88           | 23 1/2        | 160          | 16 1/2        |
| November  | 98           | 21 1/2        | 160          | 17 1/2        |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1912.

Nentsbury

|             |
|-------------|
| ...Mos. Av. |
| ...Mos. Av. |

## Report of the Nenthead Mines December 1942

### REPORT OF THE NENTHEAD MINES.

M I N E S.  
D E C E M B E R 1 9 4 2

|               | <u>Nentsbury.</u> | <u>Rampgill.</u>                                                                                                     | <u>Rodderup.</u> | <u>Totals.</u>      |
|---------------|-------------------|----------------------------------------------------------------------------------------------------------------------|------------------|---------------------|
| Ore Mined     | 300 Tons          | The Mill Building has been requisitioned by the Government and is controlled by Non-Ferrous Mineral Development Ltd. | 425 Tons         | 725 Tons.           |
| Ore Milled    | 300 "             |                                                                                                                      | 425 "            | 725 "               |
| Concs. prdcd. | 15.40 "           |                                                                                                                      | 38.75 "          | 54.15 "             |
| % of Galena   | 5.13%             |                                                                                                                      | 9.10%            | N. 5.13% R. 9.10%   |
| Hours worked  | 80 hours          |                                                                                                                      | 85 hours         | 80 hrs. 85 hrs.     |
| Tons per hour | 3.75 Tons         |                                                                                                                      | 5.00 Tons        | 3.75 Tons 5.00 Tons |

#### STOCKS.

|                                                         | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|---------------------------------------------------------|-------------------|------------------|------------------|----------------|
| Crude Ore                                               | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende-Witherite                                        | 50 Tons           | 150 Tons         | Nil.             | 200 "          |
| Galena at Nentsbury, including Potters Ore, 9.210 Tons. |                   |                  |                  |                |
| " " Rodderup, " " " , 13.286 "                          |                   |                  |                  |                |
| Witherite stock, Nil.                                   |                   |                  |                  |                |
| Fluor Spar sold, 10.25 Tons.                            |                   |                  |                  |                |

FUEL OIL, consumed at Nentsbury, 1.025 Tons.  
do. " " Rodderup, Nil.

COMPRESSED AIR produced at Nenthead, about 600 cu.ft. per minute at 75 to 80 lbs. pressure at the face in the mine, from Water Power.

COMPRESSED AIR produced at Rodderup, about 750 cu.ft. per minute from Electric Power and Water Power, at from 80 to 85 lbs. pressure at the face. The extra power produced was to supply the Canadian drillers for diamond drilling.

## **NENTHEAD MINES DECEMBER 1942**

NENTSBURY MINE. There has been no important change in the position underground. Labour is difficult to handle and an increase of labour is impossible, to obtain. Our mine foreman, Henry Peart, who met with a serious accident, when not on duty for the V.M. Co., will return to duty early in 1943, after being incapacitated for over six months. He has been certified as medically fit by the Medical Officer of Hexham Hospital. The V.M. Co. is not liable for compensation.

MILL. In good order.

RODDERUP MINE. Conditions in Rodderup show no appreciable change. Here also labour is difficult to obtain. Consideration has been given to transferring the miners employed in Nentsbury to Rodderup, but owing to petrol shortage it has been found impossible to transport them to and from the mine, and, in any case, Nentsbury would have to be maintained by at least two miners. No advantage would result from such a small number of men. The Canadian drilling squad drilled 60.5 ft. during the month, and extended the hole from 40 ft. to 100.5 ft. in December, when the piston of the drill broke and before a new piston was delivered, the squad was ordered to leave for Military drill. A fresh squad is expected to arrive early in 1943. The 60.5 ft. drilled, passed through some good ore. It is our intention to drill this hole to at least 250 ft. if possible to get to the bottom of the Tyne Bottom Limestone.

MILL. In good order.

SALES OF ORES. Lead Ore. Most of the high-grade concentrates was sold to Messrs. Morris Ashby Ltd., London & Liverpool, and to the British Pyros White Lead Co., Ltd., West Drayton, London. The lower grade concentrates was sold to Messrs. Walkers Parker Ltd., Newcastle.

Fluor Spar. A parcel of 10.25 Tons was sold.

Stone & Gravel. During the month 456.8 Tons were sold.

GENERAL. Many interviews with Government officials and much correspondence both with them and the Co.'s solicitors and with the District Valuer has brought no decisive result. Interviews in Newcastle, with Mr. Forster Brown, Mineral Agent for Greenwich hospital Estates, has resulted in an agreement re: the ownership of the dumps, subject to the approval of the Solicitor for the Admiralty. This has been prolonged by all parties having to search for and peruse old documents.



DECEMBER 1942.

N e n t s b u r y      M i n e.

\*\*\*\*\*

Development Footage: Nil.

H. Kielty & Partners.

152½ Days Worked.

Vein.

|                     | L  | H    | S.F.  | S.M.    | W.  | C.F.        | C.M.           |                |
|---------------------|----|------|-------|---------|-----|-------------|----------------|----------------|
| Dupont - String     | 15 | x 15 | - 225 | - 20.90 | x 6 | - 1350      | - 38.22        | )              |
| Liverick - E. drive | 10 | x 10 | - 100 | - 9.29  | x 6 | - 600       | - 16.99        | )              |
| " - N. "            | 7  | x 11 | - 77  | - 7.15  | x 6 | - 462       | - 13.08        | ) @ Days Wages |
| Second Sun          | 18 | x 6  | - 108 | - 10.03 | x 8 | - 864       | - 24.47        | )              |
|                     |    |      |       |         |     | <u>3276</u> | <u>- 92.76</u> | )              |

Tonnage to Mill:- 300

Wages Paid: £86.16.1

Cost per Cu.M.:- 18/9½

R o d d e r u p      M i n e.

\*\*\*\*\*

Development Footage: Nil.

West Flats.

J. Johnson & Partners.

209 Days Worked.

Flat.

|             | L  | W    | S.F.  | S.M.    | H.   | C.F.        | C.M.            |                |
|-------------|----|------|-------|---------|------|-------------|-----------------|----------------|
| No.5 Bottom | 4  | x 16 | - 64  | - 5.95  | x 15 | - 960       | - 27.18         | )              |
| " 4 Pillar  | 4  | x 16 | - 64  | - 5.94  | x 5  | - 320       | - 9.06          | )              |
| " " "       | 10 | x 16 | - 160 | - 14.86 | x 5  | - 800       | - 22.65         | )              |
| " " "       | 11 | x 16 | - 176 | - 16.35 | x 5  | - 880       | - 24.92         | )              |
| " " "       | 9  | x 11 | - 99  | - 9.20  | x 6  | - 594       | - 16.82         | ) @ Days Wages |
| " " "       | 12 | x 30 | - 360 | - 33.44 | x 6  | - 2160      | - 61.16         | )              |
| " " "       | 12 | x 16 | - 192 | - 17.84 | x 5  | - 1960      | - 27.18         | )              |
|             |    |      |       |         |      | <u>6674</u> | <u>- 188.97</u> | )              |

Tonnage to Mill:- 425

Wages Paid £123. 5. 6.

Cost per Cu.M.:- 13/0½.

MINE STATISTICS December 1942.

| Tons of Ore Mined. |      |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |       | Days Worked |           |        |         |            | Tons per Miner's Day |        |       | Cubic Metres per Miner's Day |       |          | Wages paid per Miner's Day |       |           | Wages paid per Underground Man |          |       | Wages paid per Cubic Metre |       |      | No. of Drills Working | Wages paid per ton of Ore |  |
|--------------------|------|-------|------------------|---------|-------|----------------------|---------|-------|-------------|-----------|--------|---------|------------|----------------------|--------|-------|------------------------------|-------|----------|----------------------------|-------|-----------|--------------------------------|----------|-------|----------------------------|-------|------|-----------------------|---------------------------|--|
|                    |      |       |                  |         |       |                      |         |       | Miners      | Labourers |        | Bar-    |            |                      |        |       |                              |       |          |                            |       |           |                                |          |       |                            |       |      |                       |                           |  |
| Headings.          | Dev. | Total | In Ore           | In Dead | Total | In Ore               | In Dead | Total | In Ore      | In Dead   | In Ore | In Dead | Wages gins | Total                | In Ore | Total | In Ore                       | Total | Headings | Dev.                       | Total | Headings  | Total                          | Headings | Total | Headings                   | Total | lbs. | per ton               |                           |  |
|                    |      |       |                  |         |       |                      |         |       |             |           |        |         |            |                      |        |       |                              |       |          |                            |       |           |                                |          |       |                            |       |      |                       |                           |  |
| Nentsbury          | 300  | -     | 300              | 93      | -     | 392                  | 152     | -     | 47          | -         | 47     | -       | 49         | 199                  | 2.00   | 2.00  | 0.61                         | 0.61  | 1.50     | 0.47                       | 11.5  | -         | 10/9                           | 23/1     | 23/1  | 23/1                       | 23/1  | 23/1 | 220                   | 0.73                      |  |
| 11 Mos Av          | 321  | -     | 321              | 113     | -     | 285                  | 162     | -     | 53          | -         | 53     | -       | 215        | 1.98                 | 1.98   | 0.59  | 0.59                         | 1.47  | 0.53     | 11.7                       | -     | 10/11 1/2 | 21/6                           | 21/6     | 21/6  | 21/6                       | 21/6  | 202  | 0.64                  |                           |  |
| 12 Mos Av          | 319  | -     | 319              | 111     | -     | 288                  | 161     | -     | 53          | -         | 53     | -       | 214        | 1.98                 | 1.92   | 0.68  | 0.68                         | 1.47  | 0.52     | 11.7                       | -     | 10/11 1/2 | 21/7                           | 21/7     | 21/7  | 21/7                       | 21/7  | 203  | 0.69                  |                           |  |
| Rodderup           | 425  | -     | 425              | 189     | -     | 236                  | 209     | -     | 27          | -         | 27     | -       | 234        | 2.03                 | 2.03   | 0.90  | 0.90                         | 1.80  | 0.80     | 11.9                       | -     | 11/9      | 11/6                           | 11/6     | 11/6  | 11/6                       | 11/6  | 351  | 0.82                  |                           |  |
| 11 Mos Av          | 452  | -     | 452              | 180     | -     | 261                  | 194     | -     | 34          | -         | 34     | -       | 228        | 2.29                 | 2.29   | 0.89  | 0.89                         | 1.90  | 0.75     | 11.7                       | -     | 11/7 1/2  | 15/11                          | 15/11    | 15/11 | 15/11                      | 15/11 | 343  | 0.98                  |                           |  |
| 12 Mos Av          | 450  | -     | 450              | 181     | -     | 268                  | 195     | -     | 33          | -         | 33     | -       | 228        | 2.27                 | 2.27   | 0.89  | 0.89                         | 1.89  | 0.75     | 11.7                       | -     | 11/7 1/2  | 15/11                          | 15/11    | 15/11 | 15/11                      | 15/11 | 344  | 0.97                  |                           |  |

# COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱..... Rodderup .....✱

Nentsbury ..... Tons in Dead .....  
Rodderup ..... Tons in Dead .....

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|                |  |
|----------------|--|
| ..... Mos. Av. |  |
| ..... Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 107          | 26/6          | 234          | 13/8.         |
| February  | 161          | 16/1 1/2      | 189          | 14/15         |
| March     | 91           | 28/10         | 160          | 16/1.         |
| April     | 102          | 23/1          | 144          | 18/4.         |
| May       | 141          | 16/8          | 114          | 20/10.        |
| June      | 129          | 18/11 1/2     | 207          | 11/3.         |
| July      | 160          | 16/1 1/2      | 193          | 13/17         |
| August    | 77           | 26/-          | 197          | 13/6.         |
| September | 101          | 19/10         | 147          | 19/9.         |
| October   | 88           | 23/1          | 160          | 16/2.         |
| November  | 98           | 21/8          | 160          | 17/8.         |
| December  | 93           | 23/1          | 189          | 11/6.         |

COMPARATIVE STATEMENT.

✱ Nentsbury ✱ Rodderup ✱

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 107          | 26/6          | 234          | 13/8          |
| February  | 161          | 16/1 1/2      | 189          | 14/5          |
| March     | 91           | 28/10         | 160          | 16/-          |
| April     | 102          | 23/1          | 144          | 18/4          |
| May       | 141          | 16/8          | 114          | 20/10         |
| June      | 129          | 18/11 1/2     | 207          | 11/3          |
| July      | 160          | 16/1 1/2      | 193          | 13/7          |
| August    | 77           | 26/-          | 197          | 13/6          |
| September | 101          | 19/10         | 147          | 19/9          |
| October   | 88           | 23/1          | 160          | 16/2          |
| November  | 98           | 21/8          | 160          | 17/8          |
| December  | 93           | 23/1          | 189          | 11/6          |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

| Nentsbury   |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

**ANNUAL REPORT  
of the  
NENTHEAD MINES  
1942**

NENTSBURY MINE.

During 1942, the British Government ordered miners who had previously worked in coal mines, even if only for a short time, to return to coal mining at their direction. The Government also called up some of the young miners to join the various branches of the services. Employers were allowed to appeal for the retention of the miner, and in every case an appeal was made. As a result of these appeals we were able to retain some of our minors, but applications for the retention of the younger men were not granted. Consequently the labour force, which was insufficient for 1941, was further reduced in 1942.

Work was continued during the year in spite of a heavy snow storm in the early part of the year when all roads were completely blocked with snow for several weeks. In July 1 1942 our mine foreman H. Peart, sustained a serious motoring accident when not in our employ, and was incapacitated for the remainder of the year. A skilled rock-driller was appointed as temporary foreman. The V.M. Co. was not liable for Peart's compensation for his accident.

The tonnage broken during 1942, was 3420 Tons, compared with 1978 Tons in 1941. The quantity of Lead Concentrates produced in 1942, was 195.9 Tons, compared with 153.05 Tons in 1941. The recovery percentage fell to 5.728% in 1942 as against 7.737% in 1941. Owing to the scarcity of labour in 1942, no development could be done, and the ore broken was from small veins running parallel to S2 Vein, Sincay Vein, North of Treloar vein, and a parallel vein East of Liverlck Vein and South of S2 vein. By working on these small veins, the Lead Ore tonnage in reserves, as existed and reported as 2962 Tons, was not reduced. This tonnage of 2962 Tons is estimated to be no richer than the tonnage broken in the small veins which were worked.

In the early part of the year we were asked to produce some Blende-Witherite Concentrates for a Paint manufacturing firm, employed by the Government. To produce the quantity required, 411 Tons of ore was mined and 132 Tons of Witherite Blende concentrates produced, of which 124.2 Tons realised £4. 7s. 6d. per ton on site at Nentsbury, the balance of 7.8 Tons being added to 50.65 Tons of low grade middlings, produced in 1938/39 making 58.45 Tons which was sold for £2. 17s 6d. per ton on site.

ORE RESERVES.

No Adjustment is necessary so far as the Lead Ore reserves are concerned. Those remain at 2962 Tons. The Mixed Ore reserves, calculated in December 1941 to amount to 73671 Tons, are reduced by 411 Tons, and are now estimated to amount to 76222 Tons.

I regret that the recovery values for 1942, were much lower than I anticipated would be the case for 1942, when estimating in 1941. The main reason for the

drop in values, is unskilled labour employed to break ore, resulting in more waste rock being broken and less picking of such waste rock in the mine. The type of labour is not what it was before the war, and the influence of imported labour employed in Nenthead and Alston on Government work at higher rates of pay than can be afforded by any private employer unless owning a very rich mine, has caused the employees to be dissatisfied and careless. Wages paid today are 45% higher than the 1938 level.

-----

#### RODDERUP MINE

During 1942, owing to insufficient skilled labour and the influence of faults on the deposits of Lead Ore in the Flats at Rodderup Mine, the quantity of crude ore broken amounted to 5380 Tons, compared with 9728 Tons in 1941. The recovery, percentage fell from 10.39% in 1941 to 8.915% in 1942, Concentrates amount to 479.65 Tons in 1942, a considerable decrease on the 1010.69 Tons recovered in 1941.

The reason for the fall in output of crude ore, is less skilled miners being employed with a consequent drop in "tons per man per day". The reason for the fall in output of Lead Ore is twofold. First, less tons of crude ore, and secondly, less lead percentage in the crude ore broken. The latter was caused by a disturbance in the strata by a series of small cross-courses, some throwing the strata up, and others throwing it down. The effect was a lowering of the galena values in, say, a five-foot height. In some cases when the strata was thrown down, the richest mineral was found in the bottom of the top 5'-6' of the Tyne Bottom Limestone. In other cases the strata was thrown up, and the mineral was concentrated in the top of the Limestone, and before it was possible to change over, a certain amount of the bottom, and poorer Limestone had to be, and was, broken.

In October, the Non-Ferrous Mineral Development Control, offered us a squad of Canadian Engineers (Military), to drill by a diamond-drill, holes to prove whether there was mineral in the vicinity of where we were working. Drilling commenced in November, and by the end of the month, 200.5 ft. was drilled from the end of a X-cut driven North about midway between our workings extended West and the big Cross course.

The first hole was drilled through the Tyne Bottom Limestone and cut the Plate at 200.5 ft. the limit of the extension. A second hole was put out at a different angle and extended 140.0 ft., when the Plate was cut. The core did not show any rich ore, but galena was visible in places, as were traces of Blende. The drill was then removed to the Flats just East of the Incline bottom and a hole was put out 40 ft. in an easterly direction. This hole was in payable mineral. The Canadians were then recalled for military drill. A new squad was promised us for January 1943. The Canadian Government supply the drill and the men, and pay their lodging allowance up to 24s/- per week per man. The V.M. Co. pay 6s/- per week per man to the lodging proprietor, and make a gift of from 20s/- to 35s/- per week per man, according to results. These men have all been honest workers.

## ORE RESERVES

The ore reserves last year were taken at 90,272 Tons, less 5380 Tons, broken in 1942, equals 84892 Tons. In a Flat deposit it is most difficult to compute reserves, particularly when no development has been done, and neither is it possible to estimate the percentage of Lead in the ore.

What I have written in the last paragraph under "General" in this report, applies to working Rodderup at a small loss, rather than closing the mine and having all the plant and machinery taken over by the Government at a much greater loss. Every effort will be made to avoid a loss. Under existing circumstances, and being unable to estimate, even roughly, what the results will be In 1943, I do not feel Justified In making any forecast for 1943.

## SALES OF PRODUCTS

Zinc Residue (ex Stockton).

During the year, 443.567 Tons of Zinc Residue

extracted from the Witherite Middlings delivered to Messrs. Athole G. Allen (Stockton) Ltd. In 1938/39, were sold to the Ministry of Supply for £1877. 2s. 2. The treatment, of this material is still in process, and a further sum should be derived during 1943. This amount is gross and a deduction of approx. 10s/6d per ton must be made for transport, weighing, sampling, and assaying charges. On 443.567 Tons, these charges at 110s/6 per ton amount to £232. 9s. 0., which deducted from £1877. 2s. 2d. leaves £1644. 13s. 2d., equal to a net price of 74.83 sh. Per ton of residue. The average Zinc content in the residue is approx. 34% Zn.

Lead Ore

324.005 Tons of 1/3 and 3/5 mm. Lead Ore was sold to the British Pyros White Lead Co. Ltd., West Drayton, Middlesex, and the gross amount received was £6085. 18s. 9d., from which carriage to Alston and a commission of 10s/- per ton is to be deducted.

The net price is £18. 17s. 6d. per ton on site.

284.682 Tons of Slime and low grade ore was sold to Messrs. Walker Parker & Co. Ltd., Elswick Lead Works, Newcastle-on-Tyne, for which we received a gross amount of £4151. 18s. 1d. After deducting carriage and other charges this ore realised approximately £14. ). ). Per ton on site net.

111.500 Tons of Potters (Lead) Ore, mainly 5/15 mm. with some 3/5 mm. in the early part of the year, was sold to Messrs. Morris Ashby Ltd., 95 Gresham Street, London, in kegs for export from Liverpool or Birkenhead. For this we obtained £2268. 6s. 2d. gross. After deducting carriage, cost of shipping expenses, this ore realised approximately £22. 10s. 0d. net per ton on site. Note: Revenue for part of this was prepaid in 1941.

Fluor Spar

260.45 Tons of Fluor Spar was sold during this year, realising a net price of 29.75 Shillings per ton on site.

### Blende Witherite

124.2 Tons of this material was sold at a nett price of £4. 7s. 6d. per ton on site. 7.8 Tons with 50.65 Tons of low grade middlings produced in 1938/39, was sold at a net price of £2. 17s. 6d. per ton on site.

### Stone and Chippings

3901.6 Tons, mainly chippings with some stone, was sold in 1942 at a net price of 4s/- to 4s/6d per ton for Chippings and 1s/4½d per ton net for Stone on site.

### GENERAL.

The Ministry of Supply Non-Ferrous Mineral Development Control, who since June 1940, have sent several 'Mining, Mechanical and Metallurgical Engineers to inspect Nentsbury Mine, the dumps at Nenthead and Rampgill Mill, decided in July 1942 to requisition the Rampgill Building. A requisition was served on Mr. Hallett in London, dated July 29th 1942 and a firm of contractors employed by the Non-Ferrous Mineral Development Control was actually in the village in readiness to commence removing the machinery in Rampgill immediately the notice was served. Work was commenced at once.

Unfortunately, owing to the heavy strain imposed upon me by the frequent visits of Government Engineers, the endless correspondence with various Government departments, the supervision of the mines under difficult conditions especially in regard to the supply of labour and materials caused a breakdown in my health. I was occupied daily from Sept. 1939 and often to late at night, without a holiday. On the advice of Dr. Dalgetty, who had been attending me for some months, I consulted a physician specialist in Carlisle and a radiologist. The decision of the specialist and Dr. Dalgetty was that I should at once go away from Nenthead for complete rest and was not to be worried until my health recovered. This I did and consequently I was away when Mr. Hallett was served with the requisition order for Rampgill Building. Mr. Hallett wrote and phoned Nenthead and saw the Assistant Controller and the Engineers in London and urged them to await my return before they Commenced dismantling the machinery. They refused to do so. Mr. Hallett's letters to Nenthead, and his telephone communications were brought to me by, G. Beresford, on Mr. Robinson's advice, to the Hotel where I was staying, near Ulverston, Lancs. From there I wrote Mr. Hallett, suggesting that he should come to Nenthead and meet us there at an early date. I also communicated with Messrs. Blackburn & Main, the Co.'s solicitors in Carlisle and wrote Mr. Forster brown, the mineral agent for the Greenwich Hospital estates. Mr. Hallett came to Nenthead on August 4th and we went thoroughly into all matters arising from the serving of the order, and had an appointment with Mr. McPhail, the senior partner of Messrs. Blackburn & Main to fully discuss the situation.

Since August, Mr. Hallett has been informed frequently of what has happened, and copies of all important letters and correspondence relating to the general situation have been sent to him and also to Mr. McPhail. Mr. McPhail has been consulted re: the legal position, entailing frequent visits to Carlisle for interviews. Frequent visits have also been made to Newcastle to discuss the matter with Mr. Forster Brown. Messrs. Forster Brown were appointed official advisers to the Government in regard to the Coal Commission, in Dec. 1942, and were compelled to relinquish other work. They here been succeeded by Messrs.

Wm. Armstrong & Sons, whose present address is Heddon Hall, Heddon-on-the-Wall, Newcastle-on-Tyne.

The general position regarding Rampgill, at the end of 1942, is as follows: - The complete Mill Building, not including the engine Houses and the machinery therein and the Coal Chutes, is in the hands of the Non-Ferrous Mineral Development Control, and has been since July 29th 1942. Most of the machinery has been removed, some in a damaged condition. The internal structure of the building has been changed and new machinery is in the course of erection. The Concentrating Tables and two sets of rolls have been removed to Nentsbury for use if required. The District Valuer, appointed by the Government, and Mr. J. Jackson, Consulting Engineer for the Control, visited Nenthead on the 19th November and an agreement was reached re; the removal of the machinery and the segregation of what was useable by the V.M. Co., for further use, what the Control wanted, and what would become Scrap. The promise was made that this work would be carried out immediately. This visit followed one by Sir William Larke, the Controller, and Mr. Jackson, on Nov. 5<sup>th</sup>. They both undertook to have the segregation carried out. Up to the end of the year the work was not completed neither does it seem that it will be carried out early in 1943.

Reports of each meeting will be found in the files dealing with each subject together with copies of correspondence with all parties concerned.

I desire to place on record the valuable help I received from Mr. Hallett who has worked in close collaboration with me in the Company's interest. I wish also to thank him personally - his assistance has been invaluable and being resident in London he was able to interview the Control there and thus save the Co. and myself both time and expense. I am sorry to have to report that in spite of everything we did to help the Control we have not received from them either the consideration or appreciation to which I Consider we were entitled.

A claim for Compensation, on Form No. 1 has been made and forwarded through Messrs. Blackburn & Main for the use of Rampgill Building. The amount claimed is £350 per annum. I should state that the estimate by the district Valuer, of the compensation due to the Company, will be the amount paid, and it is very doubtful whether the sum of £350 per annum will be allowed. The allowance will be based on the value of the building in 1939 and as it was not used, the value may be considered as nominal.

In addition to the Claim on form No.1 for compensation for Rampgill Building, a further Claim on Form No.2 will be made for the value of the dumps and the removal of machinery.

Re: the Dumps. From the commencement of Government interference, we have claimed that the dumps are the property of the V.M. Zinc Co. The claim was made and based on a copy of No.3 Assignment of Pink Lands dated 30th June 1896 and signed by J. C. Swan and John Pattinson, directors of the Nenthead & Tynedale Lead Co., and by Wm. Henzell, Secretary. The document states that the official seal of Societe Anonyme des Mines et Fonderies de Zinc de la Vieille Montagne was herewith affixed by Mons. St. Paul de Sincay, and

counter signed by \_\_\_\_\_, the secretary of the Council of Administration of the said Societe, in the presence of \_\_\_\_\_. (neither names are given, unfortunately). This is the only document with plan attached, which we have at Nenthead, dealing with this question. Unfortunately Mr. Dees, of Messrs. Cameron Swan & Co. of 4 St. Nicholas Buildings, Newcastle, the successors to the old Nenthead & Tynedale Lead Co., was unable to give me any assistance. The Nenthead & Tynedale Co. was wound up many years ago, and the documents relating to its activities had either been destroyed or surrendered for paper salvage.

Mr. Forster Brown, of Messrs Forster Brown & Rees, mineral agents for Greenwich Hospital until December 1942, agreed with me on Dec. 21<sup>st</sup> 1942, that it seemed from the document, which he perused, that the dumps were the property of the V.M. Co., but that, on any ores extracted from the dumps, royalty would be due to the Greenwich Hospital under the terms of the lease. Mr. Forster Brown's opinion was given subject to the opinion of the solicitors for the Admiralty in London. When the question of ownership is settled, we can, and shall, make a claim for the dumps.

Re: The machinery in Rampgill, such as Jigs, hoists, elevators, etc. etc., the Company is in a rather unfortunate position. Under an Act of Parliament passed in 1942, the Government has the right to remove any machinery not in use and buy what they require for use elsewhere. What they do not require must be disposed of as scrap at a price per ton fixed by the Government, except such as the owner may reasonably claim to hold as spares for plant then in operation. We removed as much as we could to Nentsbury and Rodderup. A considerable amount of what was machinery will become scrap, because, in dismantling it, the contractors have broken many parts which are now only scrap. The government have promised early in 1943 to segregate all machinery outside Rampgill and hand over to us what they consider we should reserve, and give us a list of what they require for their own use. The remainder will be sold by us at the best price obtainable.

Respecting Nentsbury Mine, it is probable, in my opinion, that the Government may requisition Nentsbury Mine, and use the Company's machinery to break the existing reserve of ore containing Zinc, Lead, and Witherite and treat it in Rampgill Mill. I have no information respecting the cost or type of Mill the Government is erecting in Rampgill but have reason to believe that the Mill is of American design and is mainly a flotation plant to treat 1000 Tons of dump ore daily working 7 days of 24 hours weekly. When the Mill will be ready to operate I do not know. It seems doubtful whether it will be in full working order before mid-summer 1943.

It is not possible to forecast what will happen to the Company's property during 1943.

The work this year has been extremely arduous and has caused me much anxiety. Once again I wish to place on record my thanks for the willing assistance have received from the Staff generally. They have done all they could in the interests of the Company and have faithfully discharged their duties. Restricted by Government regulations it has not been possible to achieve all I had hoped to



do, and it is possible the years results will show some financial loss. I have given this matter much consideration and decided that if the loss was not heavy it was decidedly in the Company's interest to operate the mines. If the mines were closed, the Government would undoubtedly commandeer them and the ultimate loss to the Company would be much greater. I shall continue to do all in my power to protect and preserve the Company's property and work entirely in the Company's interest.

A handwritten signature in black ink, reading "Amos Hilborn". The signature is written in a cursive style with a long, sweeping underline that extends to the right.

*\*Factory Department, Home Office,  
October 10, 1931.*

*The Chief Inspector of Factories has appointed Dr. W. S. Dalgetty to be  
Certifying Surgeon under the Factory and Workshop Acts for the Alston District  
of the County of Cumberland.*

## Report of the Nenthead Mines January 1943

### REPORT ON THE NENTHEAD MINES.

JANUARY 1943

|               | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Total.</u>        |
|---------------|-------------------|------------------|------------------|----------------------|
| Ore Mined     | 215 Tons          | Occupied by the  | 440 Tons         | 655 Tons.            |
| Ore Milled    | 215 "             | Non-Ferr         | 440 "            | 655 "                |
| Concs. Prdcd. | 9.25 "            | ous Mine         |                  |                      |
| % of Galena   | 4.30%             | ral Deve         | 39.20 "          | 48.45 "              |
|               |                   | lopment          |                  | N. R.                |
|               |                   | Ltd.             | 8.68%            | 4.30% 8.68%          |
| Hours Worked  | 58 hrs.           |                  | 90 hrs.          | 58 hrs. 90 hrs.      |
| Tons per hour | 3.71 Tons         |                  | 4.88 Tons        | 3.71 Tns. 4.88 Tons. |

#### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | 2500 Tons        | 2500 Tons.     |
| Blende-Witherite | 50 Tons           | 150 Tons         | Nil.             | 200 "          |

Galena at Nentsbury, including Potters Ore, 14.46 Tons.  
 " " Rodderup, " " " , 20.368 "

Fluor Spar sold.....10.25 Tons.

Fuel Oil consumed at Nentsbury, 1.10 Tons.  
 " " " " Rodderup, Nil.

Compressed Air produced at Nenthead, from Water Power, approx. 600 cu.ft per minute at a pressure of 75/80 lbs. at the face.

Compressed Air produced at Rodderup, about 750 cu.ft. per minute from Electric Power and Water Power, at a pressure of 80 lbs to 85 lbs per square inch at the face.

## **NENTHEAD MINES**

### **JANUARY 1943**

NENTSBURY MINE. The low result from Nentsbury is caused by having to drive in the low random in the Limestone in two working places to get under the higher grade of ore above. In a month or so the tonnage and grade should improve. The ore is not rich, and the few Lead Miners employed are not sufficient to supply the Mill full time.

MILL. In good order.

RODDERUP MINE. There is little change in the general position re: Rodderup mine. During the month, the Canadian Drillers extended the hole East from 100.5 ft. to 178 ft. when the hole passed through the Tynebottom Limestone and cut the Whetstone bed. We shall remove the Canadians in February and put three holes up through the alternating beds near Nos. 1 & 2 shafts from the Blackburn Level where the branches cross the level. If payable or is found there, the output can be increased with the labour available. Transport will be much cheaper and mining costs should be lower.

MILL. In good order.

### SALES

Lead Ore. There is no change in the purchasers of Lead Ore. Parcels are sent to each firm when available.

Fluor Spar. 10.50 Tons was sold.

Stone & Gravel. During the month 495.20 Tons of Stone & Gravel were sold at the usual prices.

GENERAL. Many interviews with Government Officials and labour organisers resulted in little being accomplished although many promises were made by these gentlemen. Messrs. Wm. Armstrong & Sons have succeeded Messrs. Forster Brown & Rees, as Mineral Agents for the G.H. Estates. They are pressing for an early decision re: the ownership of the dumps. In the files will be found copies of all correspondence re: the matter in question.

JANUARY      1943.

N e n t s b u r y  
~~000000000000000000~~

M i n e.  
~~00000000~~

Development Footage: Nil.

H. Kielty & Partners.

159 Days Worked.

Vein.

|                 | L     | H       | S.F.  | S.M.    | W.  | C.F.        | C.M.           |          |
|-----------------|-------|---------|-------|---------|-----|-------------|----------------|----------|
| Liverick String | S. 12 | x 13    | - 156 | - 14.49 | x 6 | - 936       | - 26.50        | )        |
| " "             | N. 7  | x 11    | - 77  | - 7.15  | x 6 | - 462       | - 13.68        | )        |
| 2nd. Sun        |       | 11 x 10 | - 110 | - 10.22 | x 9 | - 990       | - 28.03        | ) @ Days |
| Dupont String.  |       | 8 x 15  | - 120 | - 14.15 | x 6 | - 720       | - 20.39        | ) Wages. |
|                 |       |         |       |         |     | <u>3108</u> | <u>- 88.00</u> | )        |

Tonnage to Mill:- 215

Wages Paid:- £92. 15. 0.

Cost per Cu.M.:- 21/1.

R o d d e r u p  
~~000000000000000000~~

M i n e  
~~00000000~~

Development Footage:- Nil.

Jos. Johnstone & Partners.

189 Days Worked.

Flat.

|             | L  | W    | S.F.  | S.M.    | H.   | C.F.        | C.M.            |          |
|-------------|----|------|-------|---------|------|-------------|-----------------|----------|
| No.5 Bottom | 9  | x 13 | - 135 | - 12.54 | x 15 | - 2025      | - 57.34         | )        |
| " 4 Pillar  | 30 | x 11 | - 330 | - 30.66 | x 5  | - 1650      | - 46.72         | )        |
| " " "       | 13 | x 4  | - 52  | - 4.83  | x 5  | - 260       | - 7.86          | )        |
| " " "       | 10 | x 8  | - 80  | - 7.43  | x 6  | - 430       | - 13.59         | )        |
| " " "       | 7  | x 4  | - 28  | - 2.60  | x 6  | - 168       | - 4.76          | ) @ Days |
| " " "       | 6  | x 4  | - 24  | - 2.23  | x 6  | - 144       | - 4.08          | ) Wages  |
| " " "       | 6  | x 10 | - 60  | - 5.57  | x 6  | - 360       | - 10.19         | )        |
| No.2 Side   | 17 | x 6  | - 102 | - 9.48  | x 12 | - 1224      | - 34.66         | )        |
| " " Roof    | 18 | x 9  | - 162 | - 15.05 | x 6  | - 972       | - 27.52         | )        |
|             |    |      |       |         |      | <u>7283</u> | <u>- 206.22</u> | )        |

Tonnage to Mill:- 440

Wages Paid: £111. 14. 7.

Cost per Cu.M.:- 10/10.

# MINE STATISTICS

January 1913.

|                                      | Tons of Ore Mined. |      |       | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked. |          |       |       |        |          | Tons per Miner's Day |           |       | Cubic Metres per Miner's Day |          |       | Per Underground Man |              |          | Wages paid per Miner's Day |       |          | Wages paid per Underground Man |          |       | Wages paid per Cubic Metre |         |        | No. of Drills Working |       |  | Dynamite |  |
|--------------------------------------|--------------------|------|-------|------------------|----------|-------|----------------------|----------|-------|--------------|----------|-------|-------|--------|----------|----------------------|-----------|-------|------------------------------|----------|-------|---------------------|--------------|----------|----------------------------|-------|----------|--------------------------------|----------|-------|----------------------------|---------|--------|-----------------------|-------|--|----------|--|
|                                      | Headings.          | Dev. | Total | In Ore           | In Deads | Total | Miners               |          |       | Labourers    |          |       | Total | In Ore | In Deads | Total                | Bar-Deads | Total | In Ore                       | In Deads | Total | Tons                | Cubic Metres | Headings | Dev.                       | Total | Headings | Total                          | Headings | Total | lbs.                       | per ton |        |                       |       |  |          |  |
|                                      |                    |      |       |                  |          |       | In Ore               | In Deads | Total | In Ore       | In Deads | Total |       |        |          |                      |           |       |                              |          |       |                     |              |          |                            |       |          |                                |          |       |                            |         | In Ore | In Deads              | Total |  |          |  |
| Nentsbury<br>1. Mos Av<br>... Mos Av | 215                | -    | 215   | 88               | -        | 88    | 244                  | -        | 244   | 159          | -        | 159   | 42    | -      | 42       | 135                  | 135       | 135   | 0.55                         | 0.55     | 0.55  | 1.07                | 0.44         | 118      | -                          | 118   | 169      | 109                            | 2410     | 2410  | 1012                       | 3       | 210    | 1.00                  |       |  |          |  |
| Rodderup<br>1. Mos Av<br>... Mos Av  | 440                | -    | 440   | 206              | -        | 206   | 213                  | -        | 213   | 189          | -        | 189   | 90    | -      | 90       | 233                  | 233       | 233   | 1.09                         | 1.09     | 1.09  | 1.57                | 0.74         | 1110     | -                          | 1110  | 1112     | 1112                           | 1511     | 1511  | 711                        | 4       | 301    | 0.68                  |       |  |          |  |

## COMPARATIVE STATEMENT.

✱ Nentsbury ✱ Rodderup ✱

Nentsbury Tons in Deads  
Rodderup Tons in Deads

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|              |  |
|--------------|--|
| ... Mos. Av. |  |
| ... Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 88           | 2410          | 206          | 1511.         |
| February  |              |               |              |               |
| March     |              |               |              |               |
| April     |              |               |              |               |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report of the Nenthead Mines February 1943

REPORT of the NENTHEAD  
MINES.

FEBRUARY 1943

|               | <u>Nentsbury.</u>       | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u>      |
|---------------|-------------------------|------------------|------------------|---------------------|
| Crude Ore     | 260 Tons                | Occupied by      | 395 Tons         | 655 Tons            |
| Ore Milled    | 260 "                   | Non-Ferrous      | 395 "            | 655 "               |
| Cones prdcd.  | 11.0 "                  | Mineral Dev      | 38.0 "           | 49.0 "              |
| % of Galena   | 4.23%                   | elopment         | 9.62%            | N. R.<br>4.23 9.62% |
| Hours Worked  | <del>XXXX</del> 69 hrs. | Ltd.             | 81 hrs.          | 69 hrs 81 hrs       |
| Tons per hour | 3.77 Tons               |                  | 4.88 Tons        | 3.77 4.88           |

### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | 2500 Tons        | 2500 Tons.     |
| Blende-Witherite | 50 Tons           | 150 Tons         | Nil.             | 200 "          |

GALENA at Nentsbury, including Potters Ore, 25.460 Tons  
" " Rodderup, " " " , 29.364 "

Fluor Spar sold.....11.50 Tons.

Fuel Oil consumed at Nentsbury, 1.30 Tons.  
" " " " Rodderup, Nil.

Compressed Air produced at Nenthead from Water Power, approx. 600 cu.ft. per min. at a pressure of 75/80 lbs. in the mine.

Compressed Air produced at Rodderup from Electric Power and Water Power about 750 cu.ft. per min. at a pressure of 80/85 lbs per sq. inch at the face.

## NENTHEAD MINES FEBRUARY 1943

NENTSBURY MINE. The result from Nentsbury is slightly better than for January. More ore was broken, 260 v. 215 equals 45 Tons more, and more concentrates produced, 11.0 v. 9.25, equals 1.75 Tons more. The grade is slightly better but is not good enough to meet all costs. Under most trying circumstances we are doing all we can to increase production and to keep hold of the Co.'s rolling stock and maintain the mine under the terms of the lease. In other words we are trying "to make the best of a bad job."

MILL. In good running order.

RODDERUP MINE. There is little change underground. In January the ore mined was 440 Tons and the concentrates produced were 39.2 Tons. The percentage recovery was 8.68% Galena. In Febry., concentrates recovered amounted to 38.00 Tons, and the percentage recovery was 9.62% approx.. The grade of ore was therefore about 1% higher than Janry. The number of days worked was 220 v. 279 in January, hence a lower tonnage.

During February, the Canadian drillers put up a hole slightly inclined through the alternating beds. Mineral was visible in the core, but this place was left when the piston of the drill broke. It has been decided to put holes from a X-cut about mid-way between Nos. 1 and 2 Shafts and the Incline, in a Westerly direction to prove what area, if any, is mineralised.

MILL. In good order.

### SALES.

Lead Ore. As usual and to the same firms.

Fluor Spar. A small parcel of 11.5 Tons was sold.

Stone & Gravel. 338.45 Tons sold at usual prices.

GENERAL. Early in February, Messrs Armstrong & Sons, informed us they would like me to interview them at their offices at Heddon-on-the-Wall, near Newcastle, re: the ownership of the dumps. They also informed me by letter that the Solicitor for G.H. Estates agreed with the findings of Messrs. Forster Brown & Rees and myself on Dec. 21<sup>st</sup> 1942, and they also agreed that Royalty was liable on the mineral recovered from the dumps, and that the V.M. Co. would recover it from the N.F.M.D. Control, and pay it to G.H. Estates, but that the gravel was the property of the V.M. Co.. It was doubtful if 1d per ton Royalty for all gravel sold could be enforced.. I wrote the Controller Sir Wm. Larke to that effect and submitted a copy to Messrs. Armstrong & Sons before posting it to Sir Wm. Larke. They advised me to post it, without altering a word, which I did. Interviews and correspondence with these people is endless.

FEBRUARY 1943.

Nentsbury

Mine

Development Footage:- Nil.

J. G. Armstrong & Partners.

158½ Days Worked.

Vein.

|                | L       | H | S.F. | S.M. | W         | C.F. | C.M. |          |
|----------------|---------|---|------|------|-----------|------|------|----------|
| Liverick       | 14 x 12 | - | 168  | -    | 15.61 x 6 | -    | 1008 | - 28.54  |
| "              | 20 x 15 | - | 300  | -    | 27.87 x 6 | -    | 1800 | - 50.97  |
| " String S.    | 13 x 12 | - | 156  | -    | 14.49 x 6 | -    | 936  | - 26.50  |
| " N.           | 11 x 10 | - | 110  | -    | 10.22 x 6 | -    | 660  | - 18.69  |
| 2nd Sun.       | 7 x 10  | - | 70   | -    | 6.50 x 3  | -    | 210  | - 5.95   |
| "              | 10 x 10 | - | 100  | -    | 9.29 x 4  | -    | 400  | - 11.33  |
| Dupont String. | 10 x 15 | - | 150  | -    | 13.93 x 6 | -    | 900  | - 25.48  |
|                |         |   |      |      |           |      | 5914 | - 167.46 |

Days  
Wages.

Tonnage to Mill:- 260

Wages Paid: £94. 5. 11.

Cost per Cu.M.:- 11/3.

Rodderup

Mine.

Development Footage:- Nil.

Jos. Johnston & Partners.

149 Days Worked.

Flat.

|              | L       | W | S.F. | S.M. | H.        | C.F. | C.M. |          |
|--------------|---------|---|------|------|-----------|------|------|----------|
| No. 5 Bottom | 6 x 12  | - | 72   | -    | 6.69 x 15 | -    | 1080 | - 30.58  |
| " 4 Pillar   | 18 x 12 | - | 216  | -    | 20.07 x 6 | -    | 1296 | - 36.70  |
| " "          | 21 x 8  | - | 168  | -    | 15.61 x 5 | -    | 840  | - 23.78  |
| " "          | 24 x 6  | - | 144  | -    | 13.38 x 6 | -    | 864  | - 24.46  |
| " 2 Roof     | 27 x 8  | - | 216  | -    | 20.07 x 5 | -    | 1080 | - 30.58  |
| " "          | 12 x 12 | - | 144  | -    | 13.38 x 5 | -    | 720  | - 20.39  |
| Rise (Shale) | 6 x 5   | - | 30   | -    | 2.78 x 13 | -    | 390  | - 11.04  |
|              |         |   |      |      |           |      | 6270 | - 177.53 |

Days  
Wages.

Tonnage to Mill:- 395

Wages Paid:- £88. 3. 3.

Cost per Cu.M.:- 9/11.



| MINE STATISTICS   |  |      |  |                  |  |         |  |                      |  |        |  |             |  |       | February 1943 |                      |  |         |  |                              |  |        |  |                     |  |       |  |                            |  |         |  |                                |  |        |  |                            |  |       |  |                       |  |         |  |          |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |
|-------------------|--|------|--|------------------|--|---------|--|----------------------|--|--------|--|-------------|--|-------|---------------|----------------------|--|---------|--|------------------------------|--|--------|--|---------------------|--|-------|--|----------------------------|--|---------|--|--------------------------------|--|--------|--|----------------------------|--|-------|--|-----------------------|--|---------|--|----------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|-------|--|--------|--|---------|--|
| Tons of Ore Mined |  |      |  | Cubic Metres Cut |  |         |  | Tons per Cubic Metre |  |        |  | Days Worked |  |       |               | Tons per Miner's Day |  |         |  | Cubic Metres per Miner's Day |  |        |  | Per Underground Man |  |       |  | Wages paid per Miner's Day |  |         |  | Wages paid per Underground Man |  |        |  | Wages paid per Cubic Metre |  |       |  | No. of Drills Working |  |         |  | Dynamite |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |       |  |        |  |         |  |
| Headings          |  | Dev. |  | In Ore           |  | In Dead |  | Total                |  | In Ore |  | In Dead     |  | Total |               | In Ore               |  | In Dead |  | Total                        |  | In Ore |  | In Dead             |  | Total |  | In Ore                     |  | In Dead |  | Total                          |  | In Ore |  | In Dead                    |  | Total |  | In Ore                |  | In Dead |  | Total    |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  | Total |  | In Ore |  | In Dead |  |

COMPARATIVE STATEMENT.

\* Nentsbury \* Rodderup \*

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 88           | 24/10         | 206          | 15/1.         |
| February  | 167          | 13/10         | 177          | 14/7.         |
| March     |              |               |              |               |
| April     |              |               |              |               |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

| Nentsbury   |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

## Report of the Nenthead Mines March 1943

### REPORT of the NENTHEAD MINES. MARCH 1943.

XXXXXXXXXX

MARCH 1943.

|               | <u>Nentsbury.</u> | <u>Rampall.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|---------------|-------------------|-----------------|------------------|----------------|
| Ore Mined     | 300 Tons          | Occupied        | 480 Tons         | 780 Tons       |
| Ore Milled    | 300 "             | by the          | 480 "            | 780 "          |
| Concs. prdcd. | 17.95 "           | Non-Ferrous     | 43.05 "          | 61.00 "        |
| % of Galena   | 5.98%             | Mineral         | N.               | R.             |
| Hours Worked  | 79 hrs.           | Development     | 8.97%            | 5.98%          |
| Tons per hour | 3.8 Tons          | Control         | 91 hrs           | 79 hrs.        |
|               |                   | (Except the     | 91 hrs           | 91 hrs.        |
|               |                   | Engine House]   | 5.27Tons         | 5.27 Tons      |

Fuel Oil consumed at Nentsbury, 1.35 Tons  
" " " " Rodderup, Nil.

#### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | 50 Tons           | 150 Tons         | Nil.             | 200 "          |

GALENA at Nentsbury, including Potters Ore, 40.560 Tons  
" " Rodderup, " " " , 22.293 "

Compressed Air produced at Nentsbury from Water Power, approx. 600 cu.ft.  
approx. 600 cu.ft. per min. at a  
pressure of 75/80 lbs per sq. inch.

Compressed Air produced at Rodderup mainly from Electric energy and  
some from Water Power, approx.  
750 cu.ft. per minute at a pressure  
of 80/85 lbs per sq. inch at face.

## **NENTHEAD MINES MARCH 1943**

NENTSBURY MINE. I have to report, a further improvement in the output from Nentsbury' in quantity of ore broken and in the percentage recovery. The quantity of ore broken was 300 Tons v 260 Tons in February. The concentrates produced amounted to 17.95 Tons v 11 Tons in February, and the recovery was 5.98% v 4.23%.

The Non-Ferrous Mineral Development Control have requested me for two months to close Nentsbury Mine and remove all the miners from there to Rodderup Mine, where, they consider, the output would be increased per man per day. Taking the past six months' figures into consideration this appears reasonable, but the grade of the ore mined in Rodderup would not, most likely, be maintained at the grade recovered during the past six months, if double the number of rock-drills were used, and the output of Lead Concentrates per man employed would most probably fall. There is another aspect of the case to be considered, viz: If Nentsbury is closed by request only, and not by order, it can, and most likely would, be assumed that the Coy. and not the Government closed the mine, and immediately it was closed the Government, could, and most probably would, requisition the mine together with all the Coy's machinery and rolling stock. Nentsbury has been worked at a loss but probably the loss would not be as much as the loss of the mine and machinery. In spite of all our efforts the Government may yet order us to close the mine. The Landlords do not wish us to surrender the Leases and would be prepared to consider allowing the Co. hold them at only a nominal rent, if any. The general position is difficult and perplexing. The Control, in my judgement, are working to secure control of the whole of the water rights in Nenthead for the new plant they are erecting in Rampgill although in November 1942, the Consulting Engineer, in the presence of the Controller, stated that approx. 25% of the water we use would supply the new mill and that part of that supply would come from water we do not use for power.

MILL. In good order.

RODDERUP MINE. There is little change in the general position in Rodderup. The quantity of ore mined was 480 v 395 in Febry., and the quantity of concentrates recovered amounted to 43.05 Tons v 38.0 Tons in Febry. The percentage recovery was 8.97 v 9.62%. The fall in percentage was due to the opening up of new working Flats. The Canadians who were away one week, drilled 3 holes during March from a X-Cut N. of the Horse Level and about midway from the East End Shafts and the Incline going down to the working places in the Flats. One hole was drilled to a depth, of 46 ft. vertical. This hole was begun in plate and passed through the Tyne Bottom Limestone-19ft. the Whetstone bed- 4 ft., Whin-17ft. Only traces of Lead Ore were found in the Limestone. Hole B.L./3 West, drilled at an angle of 10 degrees to a depth of 37 ft. gave 6 ft. Plate, 19ft, Limestone, 4ft Whetstone Bed & 8ft. No payable mineral was found in the Limestone or other strata. Hole B.L./5 drilled at an angle of 45 degrees to a total inclined depth of 90 ft. equal to a vertical depth of 64 ft. The vertical figures represent Plate- 6ft, Limestone- 54ft., Whetstone Bed- 0.75ft., and Whin 3.255ft. No mineral was discovered.

It is evident that a geological disturbance has occurred where B.L./5 was drilled, to cause the Limestone to be 54 ft. thick. Hole B.L./4 will be bored in April, at an angle of 45 degrees from the horizontal. Total depth of boring done in March, 173 ft., for the three holes. Vertical 46 ft., B.L./3 37 ft., and B.L./5 90 ft.

MILL. In good order.

SALES.

Lead Ore. To the three firms as before, 5/15 mm. to M. Ashby Lt., 3/5 and 1/3 mm. to British Pyros White Lead Co. Ltd., and bulk to Walker Parker & Co.

Fluor Spar. None sold.

Stones & Gravel. 151.85 Tons sold at usual prices.

GENERAL. Considerable correspondence and many interviews have been given to officials of the Non-Ferrous Minerals Development Limited, an operating company directed by the Non-Ferrous Mineral Development Control, re: Machinery, and Plant, removed by the first Coy; and interviews with Messrs. Blackburn & Main, Solicitors, and correspondence with Mr. B. T. Hallett. Copies of all correspondence are held by Messrs. Blackburn & Main, Mr. Hallett, and in our files here. We have received a cheque for £325 from the Finance Department of the N.F.M.D. Ltd., in respect of the Crusher they purchased from us from Rampgill. This sum (£325) has been placed to the Co.'s credit at Martins Bank Ltd., Alston, in a No.2 account, and any further sums we receive from the sale of scrap and machinery will be placed in the No.2 account to keep it separate from our working account, and to be able at any time to ascertain how much we receive from the dismantled plant. Some Shafting and Cast Iron Scrap has been sold but not yet paid for. The position generally is not good, and it seems the Control, who have power from the Government, will eventually cause a heavy loss to the Company. We have submitted a claim for £42,664 odd to the Legal Department for the loss of the sale of Gravel if all the dumps are crushed based upon the actual amounts received during the years 1921 to 1942 inclusive. All that it is possible to do in the Co.'s interest is being done. The Government departments, and there are many to deal with, cause endless work and worry.

M.A.R.C.H. 1943.  
00000000 00000000

Nentsbury Mine.  
0000000000000000 00000000

Development Footage: Nil.

A. Barron & Partners

178½ Days Worked.

Vein.

|             |            | L       | H | S.F. | S.M. | W.    | C.F. | C.M. |                          |
|-------------|------------|---------|---|------|------|-------|------|------|--------------------------|
| Liverick S. |            | 18 x 7  | - | 126  | -    | 11.70 | x 5  | -    | 630 - 17.84 )            |
| "           | " Stope    | 13 x 10 | - | 130  | -    | 12.08 | x 6  | -    | 780 - 22.08 ) A. Barron  |
| "           | " N. Drive | 18 x 7  | - | 126  | -    | 11.70 | x 5  | -    | 630 - 17.84 )            |
| "           | " Hdq.     | 6 x 6   | - | 36   | -    | 3.34  | x 6  | -    | 216 - 6.12 ) H. Kielty   |
| "           | " "        | 10 x 15 | - | 150  | -    | 13.93 | x 6  | -    | 900 - 25.48 )            |
| "           | " Rise     | 6 x 4   | - | 24   | -    | 2.23  | x 6  | -    | 144 - 4.08 ) E. Phillips |

3300 - 93.44 @ Days Wages

Tonnage to Mill:- 300

Wages Paid: £112. 16. 7.

Cost per Cu.M.:- 24½/2.

~~XXXXXXXXXX~~

Rodderup Mine.  
0000000000000000 00000000

Development Footage: Nil.

West Flats.

John Emerson & Partners.

186 Days Worked.

Flat.

|                 |  | L       | W | S.F. | S.M. | H:    | C.F. | C.M. |                             |
|-----------------|--|---------|---|------|------|-------|------|------|-----------------------------|
| No. 5 Bottom W. |  | 7 x 12  | - | 84   | -    | 7.80  | x 15 | -    | 1260 - 35.68 )              |
| " " Roof W.     |  | 12 x 12 | - | 144  | -    | 13.38 | x 3  | -    | 432 - 12.32 ) John Emerson  |
| " 4. Pillars    |  | 18 x 7  | - | 126  | -    | 11.70 | x 5  | -    | 630 - 17.84 )               |
| " " "           |  | 10 x 21 | - | 210  | -    | 19.51 | x 5  | -    | 1050 - 29.78 ) J. Johnston  |
| " " "           |  | 21 x 7  | - | 147  | -    | 13.66 | x 5  | -    | 735 - 20.81 )               |
| " " "           |  | 16 x 12 | - | 192  | -    | 17.83 | x 5  | -    | 960 - 27.18 )               |
| " " "           |  | 14 x 7  | - | 98   | -    | 9.10  | x 5  | -    | 490 - 13.87 ) L. Armstrong  |
| " " "           |  | 10 x 3  | - | 30   | -    | 2.79  | x 6  | -    | 180 - 5.10 )                |
| " 2 Bottom E.   |  | 20 x 8  | - | 160  | -    | 14.86 | x 11 | -    | 1760 - 49.33 ) T. Jackson I |

7427 - 212.36

Tonnage to Mill:- 480

Wages Paid: £120. 6. 6.

Cost per Cu.M.:- 11s/4d.

March 1943

1946

|            | Tons of Ore Mined. |      |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |       | Days Worked. |         |           |        | Tons per Miner's Day |       |                      | Cubic Metres per Miner's Day |                              |        | Per Underground Man |       |                                | Wages paid per Underground Man |                            |        | Wages paid per Cubic Metre |          |          | No. of Drills Working |   | Dynamite |      |
|------------|--------------------|------|-------|------------------|---------|-------|----------------------|---------|-------|--------------|---------|-----------|--------|----------------------|-------|----------------------|------------------------------|------------------------------|--------|---------------------|-------|--------------------------------|--------------------------------|----------------------------|--------|----------------------------|----------|----------|-----------------------|---|----------|------|
|            | Tons of Ore Mined. |      |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |       | Miners       |         | Labourers |        | Days Worked.         |       | Tons per Miner's Day |                              | Cubic Metres per Miner's Day |        | Per Underground Man |       | Wages paid per Underground Man |                                | Wages paid per Cubic Metre |        | No. of Drills Working      |          | Dynamite |                       |   |          |      |
|            |                    |      |       |                  |         |       |                      |         |       |              |         |           |        |                      |       |                      |                              |                              |        |                     |       |                                |                                |                            |        |                            |          |          |                       |   |          |      |
|            | Headings.          | Dev. | Total | In Ore           | In Dead | Total | In Ore               | In Dead | Total | In Ore       | In Dead | Total     | In Ore | In Dead              | Total | In Ore               | In Dead                      | Total                        | In Ore | In Dead             | Total | In Ore                         | In Dead                        | Total                      | In Ore | In Dead                    | Total    | lbs.     | per ton               |   |          |      |
|            |                    |      |       |                  |         |       |                      |         |       |              |         |           |        |                      |       |                      |                              |                              |        |                     |       |                                |                                |                            |        |                            |          |          |                       |   |          |      |
| Nerts-Bury | 300                | -    | 300   | 98               | -       | 98    | 3.22                 | -       | 3.22  | 178          | -       | 178       | -      | 54                   | -     | 232                  | 1.68                         | 1.68                         | 1.68   | 0.52                | 0.52  | 1.29                           | 0.40                           | 12/8                       | -      | 12/8                       | 11/10    | 11/10    | 24/8                  | 3 | 265      | 0.78 |
| 2 Mos Av   | 257                | -    | 257   | 127              | -       | 127   | 1.87                 | -       | 1.87  | 168          | -       | 168       | -      | 165                  | -     | 203                  | 1.50                         | 1.50                         | 1.50   | 0.80                | 0.80  | 1.17                           | 0.62                           | 11/10                      | -      | 11/10                      | 11/-     | 11/-     | 19/11                 | 4 | 245      | 1.11 |
| 2 Mos Av   | 258                | -    | 258   | 116              | -       | 116   | 2.14                 | -       | 2.14  | 165          | -       | 165       | -      | 148                  | -     | 213                  | 1.56                         | 1.56                         | 1.56   | 0.70                | 0.70  | 1.21                           | 0.54                           | 12/11                      | -      | 12/11                      | 11/8     | 11/8     | 22/9                  | 4 | 255      | 1.00 |
| Roddensup  | 480                | -    | 480   | 212              | -       | 212   | 2.26                 | -       | 2.26  | 186          | -       | 186       | -      | 153                  | -     | 237                  | 2.57                         | 2.57                         | 2.57   | 1.14                | 1.14  | 2.02                           | 0.89                           | 12/11                      | -      | 12/11                      | 12/8     | 12/8     | 14/10                 | 4 | 326      | 0.68 |
| 2 Mos Av   | 417                | -    | 417   | 191              | -       | 191   | 2.15                 | -       | 2.15  | 169          | -       | 169       | -      | 80                   | -     | 249                  | 2.49                         | 2.49                         | 2.49   | 1.14                | 1.14  | 1.68                           | 0.77                           | 11/10                      | -      | 11/10                      | 11/5 1/2 | 11/5 1/2 | 14/10                 | 4 | 258      | 0.61 |
| 2 Mos Av   | 438                | -    | 438   | 198              | -       | 198   | 2.21                 | -       | 2.21  | 175          | -       | 175       | -      | 70                   | -     | 245                  | 2.50                         | 2.50                         | 2.50   | 1.13                | 1.13  | 1.77                           | 0.80                           | 12/12                      | -      | 12/12                      | 11/9     | 11/9     | 14/7                  | 4 | 250      | 0.64 |

### COMPARATIVE STATEMENT.

✠..... Nentsbury ..... ✠..... Rodderup ..... ✠

|                 |                    |
|-----------------|--------------------|
| Nentsbury ..... | Tons in Dead ..... |
|-----------------|--------------------|

Rodderup .....  
Tons in Deads .....

Wages paid per Cubic Metre in Headings as suggested in *your* letter of 3rd June, 1932.

Nentsbury

|  |            |
|--|------------|
|  | ..Mos. Av. |
|  | ..Mos. Av. |

Note:  
New States of Mexico are fixed by  
National Union of General Municipal  
Workers, came into operation on first  
March 1<sup>st</sup> for both years. These meet  
considerable expenses all round.

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 88           | 24/10         | 200          | 15/1          |
| February  | 107          | 13/10         | 177          | 14/7          |
| March     | 98           | 29/8          | 212          | 14/10         |
| April     |              |               |              |               |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report of the Nenthead Mines April 1943

### REPORT of the NENTHEAD MINES

APRIL 1943.

|               | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u>    |
|---------------|-------------------|------------------|------------------|-------------------|
| Ore Mined     | 332 Tons.         | Occupied by the  | 445 Tons         | 777 Tons          |
| Ore Milled    | 332 "             | Non-Ferrous Mine | 445 "            | 777 "             |
| Concs. prdcd. | 22.90 "           | ral Deve lopment | 39.55 "          | 62.45 "           |
| % of Galena   | 6.89 %            | Control.         | 8.87%            | N. R. 6.89% 8.87% |
| Hours Worked  | 88 hrs.           |                  | 91.hrs. 88 hrs   | 91 hrs            |
| Tons per hour | 3.77 Tons         |                  | 4.89 Tons 3.77   | 4.89 Tons.        |

FUEL OIL consumed at Nentsbury, 0.325 Tons  
" " " " Rodderup, Nil.

#### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | 50 Tons           | 150 Tons         | Nil.             | 200 "          |

Galena at Nentsbury, including Potters Ore, 14.900 Tons  
" " Rodderup, " " " , 15.961 "

COMPRESSED AIR produced at Nentsbury, from Water Power at Nenthead, approx. 600 cu.ft. per minute at a pressure of 75/80 lbs per square inch.

COMPRESSED AIR produced at Rodderup, from Electric Energy and from Water Power, approx. 750 cu.ft. per minute at a pressure of 80/85 lbs per sq.inch at face.

NOTE: We have also in stock at Rodderup for Messrs. Morris Ashby Ltd., London, at their own risk, 16.50 Tons of 5/15 mm. Lead Ore, packed in steel drums, which has been bought, and paid for, by this firm.



## **NENTHEAD MINES**

### **APRIL 1943**

NENTSBURY MINE. I have again to report a further improvement in the output from Nentsbury, both in quantity of output of mine-ore and concentrates recovered. The quantity of ore mined was 332 tons v. 300 in March, and the quantity of concentrates amounted to 22.90 Tons v. 17.95 in March. The percentage of recovery was 6.89% v. 5.98% in April. The latest news re: the closing of Nentsbury Mine is that the Control has decided not to order me to close it at present, but as the Control changes its opinion frequently it is impossible to forecast what it may do later, and this also applies to the water question, which is still under consideration. I cannot forecast what the average monthly output will be with any degree of accuracy. The labour position is most difficult, odd men are being taken for other services considered more important by the National Service Officer, while the demand for men for the forces continues, and with the present World situation we are compelled to live from day to day.

MILL. In good running order.

RODDERUP MINE. There is little change in the position in Rodderup underground. The quantity of ore mined was 445 Tons v 480 in March and the quantity of Concentrates recovered was 39.55 Tons v. 43.05 Tons in March. The percentage recovery was 8.87% v. 8.97% in March. By Government regulation, April 24th & 26th were declared holidays.

During the Month, the Canadians bored in three holes, a total of 249 feet. The various holes bored at different inclinations were respectively 123 ft: 30 ft., when this hole had to be stopped: and 96 ft. Both the first and third holes were drilled through the Limestone into the Whinstone. Mineral (Lead Ore) was found in these two holes, but from the core it is not possible to state if the mineral in quantity is payable. On the whole, I regard the results from diamond drilling disappointing both in regard to the discovery of mineral values and in the speed drilled. It is only fair to state that the ground is very difficult for drilling, and owing to the caving of the hole, large diameter tubes have to be used to enable the core to be withdrawn.

Unless compelled by the Government, I do not intend to continue drilling much longer. There are nine drillers here at, present, with a Sergeant in charge, and the cost of Compressed Air, plus the difference for lodging between 24s/6d per day, and 35s/- per day, that is between the Army allowance and the actual cost, with extra for the Sergeant is more than I consider we receive value.

Furthermore, the ground where the Canadians are drilling at present, is where we wish to work and where we expected, and do expect, to find payable ore.

MILL. In good order.

### SALES OF LEAD ORE ETC.

Lead Ore. The ore is sold to three firms, Morris Ashby Ltd., 5/15 mm., British Pyros White Lead Co. Ltd, 3/5 and 1/3 mm., and Walker Parker & Co., bulk ore, mainly Slimes.

Fluor Spar. None sold.

Stone & Gravel. During the month 332.25 Tons were sold at the usual prices.



GENERAL. As happened two years ago and ever since, considerable correspondence and many interviews have taken place here and elsewhere with Government officials representing the Non- Ferrous Mineral Development Control. The whole of the dumps and land on which the dumps are deposited, and a small piece of land at Brownley Hill the property of the V.M. Co., have been requisitioned. The question of compensation is in the hands of Government Valuers and Law Officers of the Crown. Claims for compensation, on behalf of the V.M. Co., will be submitted directly we know what the attitude of the Valuers and Law Officers are likely to be. Copies of all correspondence of importance relating to the question of compensation, have been sent to Mr Hallett, and Messrs. Blackburn & Main, the Co.'s solicitors, and before taking any action, our views are exchanged and considered and agreement reached. We are doing all we possibly can to protect the Co.'s interest and shall continue to do so. In my last monthly report, I sated that £325 had been paid into Martins Bank Ltd., Alston to the Co.'s No.2 A/c for material sold at Rampgill. A further sum of £200, making a total of £525, has been paid in during April. Further sums are likely to be paid into this account later. The general position causes us much anxiety and entails a tremendous amount of correspondence and time.

Nentsbury Mine.  
 @@@@@@@@@@@@@@@@@@

Development Footage:- Nil.

A. Barron & Partners.

139½ Days worked.

| Vein.              | L       | H | S.F. | S.M. | H.        | C.F. | C.M. |                       |
|--------------------|---------|---|------|------|-----------|------|------|-----------------------|
| Liverick String N. | 12 x 10 | - | 120  | -    | 11.16 x 6 | -    | 720  | - 20.39 ( A.Barron    |
| " " S.             | 15 x 8  | - | 120  | -    | 11.15 x 6 | -    | 720  | - 20.38 (             |
| "                  | 19 x 10 | - | 180  | -    | 17.65 x 6 | -    | 1140 | - 32.28 ( H.Kielty    |
| "                  | 20 x 18 | - | 360  | -    | 33.44 x 6 | -    | 2160 | - 61.16 ( J.Armstrong |

4740 - 134.21 @ Days Wages

Tonnage to Mill:- 332 Tons

Wages Paid:- 298: -: 7.

Cost per Cu.M.:- 14s/7d.

---

Rodderup Mine.  
 @@@@@@@@@@@@@@@@@@

Development Footage:- Nil.

West Flats.

J. Emerson & Partners.

157 Days worked.

| Flat.        | L       | W | S.F. | S.M. | H.        | C.F. | C.M. |                        |
|--------------|---------|---|------|------|-----------|------|------|------------------------|
| No.5 Bottom  | 2 x 15  | - | 130  | -    | 2.79 x 15 | -    | 450  | - 12.74 ( J.Emerson    |
| " " "        | 15 x 10 | - | 150  | -    | 13.93 x 6 | -    | 8900 | - 25.48 (              |
| No.4 Pillars | 24 x 10 | - | 240  | -    | 22.30 x 6 | -    | 1440 | - 40.77 (              |
| " " "        | 27 x 12 | - | 324  | -    | 30.10 x 6 | -    | 1944 | - 55.04 (L.Armstrong   |
| " " "        | 13 x 9  | - | 117  | -    | 10.87 x 6 | -    | 702  | - 19.88 (              |
| No.2 Bottom  | 12 x 8  | - | 96   | -    | 8.91 x 11 | -    | 1056 | - 29.20 ( T. Jackson I |

6492 - 183.81 @ Days Wages

Tonnage to Mill:- 445 Tons

Wages Paid:- £112: 7: 2.

Cost per Cu.M.:- 12s/3d.

MINE STATISTICS April 1943

|           | Tons of Ore Mined |      |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |       | Days Worked |         |       |           |         |       | Tons per Miner's Day |        |         | Cubic Metres per Miner's Day |        |         | Per Underground Man |      |              | Wages paid per Miner's Day |      |       | Wages paid per Underground Man |       |          | Wages paid per Cubic Metre |      |         | No. of Drills Working | Dynamite |        |
|-----------|-------------------|------|-------|------------------|---------|-------|----------------------|---------|-------|-------------|---------|-------|-----------|---------|-------|----------------------|--------|---------|------------------------------|--------|---------|---------------------|------|--------------|----------------------------|------|-------|--------------------------------|-------|----------|----------------------------|------|---------|-----------------------|----------|--------|
|           | Headings.         | Dev. | Total | In Ore           | In Dead | Total | In Ore               | In Dead | Total | Miners      |         |       | Labourers |         |       | Total                | In Ore | In Dead | Total                        | In Ore | In Dead | Total               | Tons | Cubic Metres | Headings                   | Dev. | Total | Headings                       | Total | Headings | Total                      | lbs. | per ton |                       |          |        |
|           |                   |      |       |                  |         |       |                      |         |       | In Ore      | In Dead | Total | In Ore    | In Dead | Total |                      |        |         |                              |        |         |                     |      |              |                            |      |       |                                |       |          |                            |      |         |                       | Bar.     |        |
|           |                   |      |       |                  |         |       |                      |         |       |             |         |       |           |         |       |                      |        |         |                              |        |         |                     |      |              |                            |      |       |                                |       |          |                            |      |         |                       |          | In Ore |
| Nentsbury | 332               | -    | 332   | 13H              | -       | 13H   | 2H8                  | -       | 2H8   | 1H0         | -       | 1H0   | -         | 18U     | -     | 18U                  | -      | 175     | 072                          | 1H1    | -       | 1H1                 | 135  | 135          | 185                        | 185  | 715   | 715                            | 8     | 8        | 310                        | 0.93 |         |                       |          |        |
| 3 Mos. Av | 258               | -    | 258   | 11U              | -       | 11U   | 2H4                  | -       | 2H4   | 105         | -       | 105   | -         | 213     | -     | 213                  | -      | 15U     | 070                          | 1A1    | -       | 1A1                 | 113  | 113          | 229                        | 229  | 915   | 915                            | 3     | 3        | 355                        | 1.00 |         |                       |          |        |
| H Mos. Av | 276               | -    | 276   | 120              | -       | 120   | 222                  | -       | 222   | 159         | -       | 159   | -         | 207     | -     | 207                  | -      | 173     | 075                          | 127    | -       | 127                 | 119  | 119          | 218                        | 218  | 811   | 811                            | 3     | 3        | 219                        | 0.97 |         |                       |          |        |
| Rodderup  | 4H5               | -    | 4H5   | 18H              | -       | 18H   | 2H1                  | -       | 2H1   | 157         | -       | 157   | -         | 199     | -     | 199                  | -      | 233     | 117                          | 1H4    | -       | 1H4                 | 143  | 143          | 1515                       | 1515 | 471   | 471                            | H     | H        | 271                        | 0.61 |         |                       |          |        |
| 3 Mos. Av | 438               | -    | 438   | 198              | -       | 198   | 221                  | -       | 221   | 175         | -       | 175   | -         | 245     | -     | 245                  | -      | 250     | 113                          | 122    | -       | 122                 | 119  | 119          | 1417                       | 1417 | 617   | 617                            | H     | H        | 250                        | 0.64 |         |                       |          |        |
| H Mos. Av | 440               | -    | 440   | 19H              | -       | 19H   | 227                  | -       | 227   | 171         | -       | 171   | -         | 234     | -     | 234                  | -      | 258     | 113                          | 128    | -       | 128                 | 1210 | 1210         | 1419                       | 1419 | 617   | 617                            | H     | H        | 275                        | 0.65 |         |                       |          |        |

COMPARATIVE STATEMENT.

Nentsbury Nentsbury Rodderup

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 88           | 2410          | 200          | 1511          |
| February  | 117          | 1310          | 177          | 1417          |
| March     | 93           | 2915          | 212          | 1410          |
| April     | 134          | 1815          | 184          | 1515          |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

# COMPARATIVE STATEMENT.

Nentsbury ..... Rodderup .....

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 88           | 2410          | 206          | 1511          |
| February  | 157          | 1310          | 177          | 1417          |
| March     | 93           | 2415          | 212          | 1416          |
| April     | 134          | 1815          | 184          | 1515          |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Nentsbury ..... Tons in Dead .....  
Rodderup ..... Tons in Dead .....

# Report of the Nenthead Mines May 1943

## REPORT of the NENTHEAD MINES.

MAY 1943.

|               | <u>Nentsbury.</u> | <u>Rampgill.</u>     | <u>Rodderup.</u> | <u>Totals.</u>    |
|---------------|-------------------|----------------------|------------------|-------------------|
| Ore Mined     | 256 Tons          | In the occupation of | 380 Tons         | 636 Tons          |
| Ore Milled    | 256 "             | Non-Ferrous Minerals | 380 "            | 636 "             |
| Concs. prdcd. | 15.00 "           | Development Ltd.     | 30.5 "           | 45.5 "            |
| % of Galena   | 5.85%             |                      | 8.02%            | N. 5.85% R. 8.02% |
| Hours Worked  | 88 hrs.           |                      | 75 hrs.          | 88 hrs. 75 hrs    |
| Tons per hour | 3.77 Tons         |                      | 5.00 Tons        | 3.77 5.00 Tons.   |

xxx

FUEL OIL consumed at Nentsbury, 0.25 Tons  
" " " " Rodderup, NIL.

### STOCKS.

|                                                                                           | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-------------------------------------------------------------------------------------------|-------------------|------------------|------------------|----------------|
| Crude Ore                                                                                 | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende-Witherite                                                                          | 50 Tons           | 150 Tons         | Nil.             | 200 "          |
| Galena at Nentsbury, including Potters Ore, 27.20 Tons<br>" " Rodderup, " " " " , 15.64 " |                   |                  |                  |                |

Compressed Air produced at Nenthead, from Water Power, about 600 cu.ft. per min. at a pressure of 65.70 lbs. per sq. inch.

Compressed Air produced at Rodderup, from electrical energy and water power, approx. 750 cu.ft. per min. at a pressure of 80/85 lbs. per sq. inch at face.

NOTE; Messrs. Morris Ashby Limited, London, have 16.50 Tons of 5/15 mm. Lead Ore in Kegs, stored at Rodderup at their risk and for which they have paid.

## **NENTHEAD MINES MAY 1943**

NENTSBURY MINE. The month of May showed a falling-off in output at Nentsbury, partly owing to less days worked, and mainly because of 1% lower grade of ore mined and milled. The grade of the ore milled gave a recovery of 5.85% v. 6.89% in April and 5.98% in March. The main difficulty is the labour problem. We have only 9 hands all told in the mine. I have approached the Non-Ferrous Minerals Development Ltd., to purchase from us, on assay value, the Zinc-Lead Ore in Nentsbury in the S.1. Vein and have carefully calculated that if they will do so, we can mine upwards of 500 Tons per month, with the same men, and meet all costs. The cost of tramming is a serious matter now, but would be reduced to a minimum if we were mining Zinc-Lead Ore. The S.1 Vein is just over the Horse Level and all ore broken will fall into the rises. The N.F.M.D. Ltd. is controlled by the Government and does not move very quickly. It may therefore be June or July before they arrive at a decision.

MILL. In good order.

RODDERUP MINE. At Rodderup, underground, we were handicapped by the Canadian drillers, and our output was lower because we could not get to drill where we wanted and where the ore was richer. The Canadians were recalled by the Government at the end of May. During May a hole was drilled to a depth of 162 ft., and one was drilled to cut the Victoria Vein to a depth of 97 ft. The latter hole went through the Tynebottom Limestone. In the first hole payable mineral was shown in the core. In the second hole some galena was visible in the core but not in payable quantities. Altogether the results from the diamond-drilling have not been encouraging.

MILL. In good running order.

### SALES OF ORE ETC.

Lead Ore. There is no change in the sales of Lead Ore. The same three firms buy our output, but M. Ashby Ltd have temporally dropped out owing to lack of shipping facilities.

Fluor Spar. None sold.

Stone & Gravel. During the month 522\*3 Tons were sold at the usual prices.

GENERAL. We have sold much of the metal removed by the Non-Ferrous Mineral Development Control, and shall sell more in June. The money received from these sales is placed to the Co.'s credit in Martins Bank, Alston, in No.2 A/c. We have not heard anything definite from the Law Officers of the Crown re: Compensation.

MAY 1943.

N e n t s b u r y      M i n e .  
 @@@@10010001000000 @@@@0000

Development Footage: Nil.

H. Kielty & Partners.

148½ Days Worked.

Vein.

|                 | L         | H | S.F. | S.M. | W.        | C.F. | C.M. |                         |
|-----------------|-----------|---|------|------|-----------|------|------|-------------------------|
| Liverick String | 10 x 6    | - | 60   | -    | 5.57 x 6  | -    | 360  | - 10.19 ( H.Kielty      |
| "               | 16 x 12   | - | 192  | -    | 17.84 x 6 | -    | 1152 | - 32.62 (               |
| "               | S.10 x 8  | - | 80   | -    | 7.43 x 8  | -    | 640  | - 18.12 (               |
| "               | N.17 x 14 | - | 238  | -    | 22.11 x 6 | -    | 1428 | - 40.43 )-A.Barron      |
| "               | N. 8 x 4  | - | 32   | -    | 2.97 x 6  | -    | 192  | - 5.43 )                |
| Heading         | 10 x 18   | - | 180  | -    | 16.72 x 6 | -    | 1080 | - 30.58 ( J.G.Armstrong |
| "               | 21 x 12   | - | 252  | -    | 23.41 x 6 | -    | 1512 | - 42.81 (               |

6364 - 180.18 @ Days Wages

Tonnage to Mill:- 256

Wages Paid: £101: 2: 9.

Cost per Cu.M.:- 11s/3d.

R o d d e r u p      M i n e .  
 @@@@@@@@@@@@@@@@@@ @@@@@@@@@

Development Footage: Nil.

J. Johnston & Partners.

180 Days Worked.

Flat.

|             | L       | W | S.F. | S.M. | H.        | C.F. | C.M. |                  |
|-------------|---------|---|------|------|-----------|------|------|------------------|
| Pillars     | 8 x 6   | - | 48   | -    | 4.46 x 6  | -    | 288  | - 8.16 )         |
| "           | 9 x 8   | - | 72   | -    | 6.69 x 6  | -    | 432  | - 12.23 )        |
| "           | 19 x 9  | - | 171  | -    | 15.88 x 6 | -    | 1026 | - 29.05 )        |
| "           | 16 x 9  | - | 144  | -    | 13.38 x 6 | -    | 864  | - 24.46 )        |
| "           | 24 x 11 | - | 264  | -    | 23.60 x 6 | -    | 1584 | - 45.85 ) @ Days |
| "           | 19 x 11 | - | 209  | -    | 19.42 x 6 | -    | 1206 | - 34.15 ) Wages  |
| Side        | 12 x 8  | - | 96   | -    | 8.92 x 6  | -    | 576  | - 16.31 )        |
| No.2 Bottom | 2 x 8   | - | 16   | -    | 1.48 x 11 | -    | 176  | - 4.98 )         |
| "           | 7 x 8   | - | 56   | -    | 5.20 x 6  | -    | 336  | - 9.51 )         |
|             |         |   |      |      |           |      | 6488 | - 183.70 )       |

Tonnage to Mill:- 380

Wages Paid:- £125: 8: -.

Cost per Cu.M.:- 13/9.

# MINE STATISTICS

May 1943

|           | Tons of Ore Mined. |      |       | Cubic Metres Cut |        |          | Tons per Cubic Metre |        |          | Days Worked. |        |          |        | Tons per Miner's Day |          | Cubic Metres per Miner's Day |        |          | Per Underground Man |      |              | Wages paid per Miner's Day |       |          | Wages paid per Underground Man |          | Wages paid per Cubic Metre |          | No. of Drills Working | Dynamite |                    |  |      |         |        |
|-----------|--------------------|------|-------|------------------|--------|----------|----------------------|--------|----------|--------------|--------|----------|--------|----------------------|----------|------------------------------|--------|----------|---------------------|------|--------------|----------------------------|-------|----------|--------------------------------|----------|----------------------------|----------|-----------------------|----------|--------------------|--|------|---------|--------|
|           | Headings.          |      |       | Total            |        |          | In Ore               |        |          | In Deads     |        |          | In Ore |                      |          | In Deads                     |        |          | In Ore              |      |              | In Deads                   |       |          | In Ore                         |          |                            | In Deads |                       |          | Wages paid per Ore |  | lbs. | per ton |        |
|           |                    |      |       |                  |        |          |                      |        |          |              |        |          |        |                      |          |                              |        |          |                     |      |              |                            |       |          |                                |          |                            |          |                       |          |                    |  |      |         | Miners |
|           |                    | Dev. | Total |                  | In Ore | In Deads | Total                | In Ore | In Deads | Total        | In Ore | In Deads | Total  | In Ore               | In Deads | Total                        | In Ore | In Deads | Total               | Tons | Cubic Metres | Headings                   | Total | Headings | Total                          | Headings | Total                      |          |                       |          |                    |  |      |         |        |
| Nentsbury | 250                | -    | 250   | 180              | -      | 142      | 148                  | -      | 82       | -            | 180    | -        | 173    | 173                  | 121      | 121                          | 142    | 100      | 13/8                | -    | 13/8         | 13/8                       | 9/4   | 8        | 210                            | 0.82     |                            |          |                       |          |                    |  |      |         |        |
| 4 Mos Av  | 270                | -    | 270   | 120              | -      | 222      | 222                  | -      | 48       | -            | 207    | -        | 173    | 173                  | 075      | 075                          | 133    | 050      | 12/7                | -    | 12/7         | 11/9                       | 11/9  | 3        | 269                            | 0.97     |                            |          |                       |          |                    |  |      |         |        |
| 5 Mos Av  | 272                | -    | 272   | 152              | -      | 206      | 157                  | -      | 45       | -            | 202    | -        | 173    | 173                  | 084      | 084                          | 135    | 065      | 12/10               | -    | 12/10        | 12/11                      | 12/11 | 3        | 259                            | 0.95     |                            |          |                       |          |                    |  |      |         |        |
| Rodderup  | 380                | -    | 380   | 184              | -      | 208      | 180                  | -      | 49       | -            | 229    | -        | 211    | 211                  | 100      | 100                          | 160    | 080      | 13/11               | -    | 13/11        | 13/10                      | 17/5  | 4        | 251                            | 0.60     |                            |          |                       |          |                    |  |      |         |        |
| 4 Mos Av  | 440                | -    | 440   | 194              | -      | 227      | 171                  | -      | 65       | -            | 234    | -        | 268    | 268                  | 113      | 113                          | 188    | 083      | 12/8                | -    | 12/8         | 12/6                       | 14/9  | 4        | 278                            | 0.63     |                            |          |                       |          |                    |  |      |         |        |
| 5 Mos Av  | 425                | -    | 425   | 192              | -      | 223      | 173                  | -      | 60       | -            | 233    | -        | 247    | 247                  | 111      | 111                          | 183    | 082      | 12/11               | -    | 12/11        | 12/9                       | 15/3  | 4        | 273                            | 0.64     |                            |          |                       |          |                    |  |      |         |        |

## COMPARATIVE STATEMENT.

Nentsbury ..... Nentsbury ..... Rodderup .....

Nentsbury ..... Tons in Deads ....

Rodderup ..... Tons in Deads ....

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |     |
|-------------|-----|
| ...         | ... |
| ...Mos. Av. | ... |
| ...Mos. Av. | ... |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 88           | 24/10         | 206          | 15/1          |
| February  | 167          | 18/10         | 177          | 14/7          |
| March     | 93           | 29/5          | 212          | 14/6          |
| April     | 134          | 18/5          | 184          | 15/5          |
| May       | 180          | 13/3          | 384          | 17/5          |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report of the Nenthead Mines June 1943

### REPORT of the NENTHEAD MINES

#### MINES

JUNE 1943.

|               | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u>      |
|---------------|-------------------|------------------|------------------|---------------------|
| Ore Mined     | 252 Tons          | Occupied         | 400 Tons         | 652 Tons            |
| Ore Milled    | 252 "             | by Non-          | 400 "            | 652 "               |
| Concs. prdcd. | 14.55 "           | Ferrous          |                  |                     |
| % of Galena   | 5.77%             | Minerals         | 39.85 "          | 54.40 "             |
|               |                   | Develop-         |                  | N. R.               |
|               |                   | ment Ltd         | 9.96%            | 5.77% 9.96%         |
| Hours Worked  | 66.50 Hrs.        |                  | 82 Hrs.          | 66.5 hrs 82 hrs.    |
| Tons per hour | 3.79 Tons         |                  | 4.88 Tons        | 3.79 Tons 4.88 Tons |

**NOTE:** From June 12th to ~~IX~~ 19th, both dates inclusive, both mines and mills were closed for the Whitsun and General Holiday in accordance with Government instructions.

#### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | 2500 Tons        | 2500 Tons.     |
| Blende-Witherite | 50 Tons           | 150 Tons         | Nil.             | 200 Tons.      |

Galena, at Nentsbury, including Potters Ore, 31.293 Tons  
" , " Rodderup, " , " , 21.490 "

Fluor Spar despatched, 23.00 Tons.

Compressed Air produced at Nenthead, from Water Power, about 600 cu.ft. per min. at a pressure of 65-70 lbs. per sq. inch in the mine.

Compressed Air produced at Rodderup, from Electrical Energy and Water Power, approx. 750 cu.ft. per min. at a pressure of 80-85 lbs. per sq. inch at face.

**NOTE:** Messrs. Morris Ashby Ltd., London, still have 16.50 Tons of 5/15 mm. Lead Ore in kegs at Rodderup at their risk and for which they have paid.

## **NENTHEAD MINES JUNE 1943**

NENTSBURY MINE. Work was carried on in the mine and mill for 20 days only during June. June 12th was a Whitsun Holiday, declared by the Ministry of Labour National Service, while June 14th to 19th, both dates inclusive, were a General Holiday, by arrangement through Government Channels, for which a week's normal pay was paid to each workman. This applied also to Rodderup Mine and Mill.

The quantity of ore mined and milled was 252 tons, from which 14.55 tons of Concentrates were produced, the recovery being 5.77%. Allowing for the weeks holiday, these compare favourably with those for May when the results were 256 Tons mined and milled, 15.00 Tons of Concentrates produced, and a recovery of 5.85%.

Re: our mining Lead-Zinc Ore for the Government. The arrangements referred to in last month's report have been accepted verbally by the Consulting Engineer, Mr. Jackson, in the presence of Mr. Anderson, the Secretary of the Non-Ferrous Mineral Development Control, who agreed to accept 1000 Tons, if broken and brought outside to be sampled and assayed in bulk. The price per ton will be arranged on a percentage basis of recovery after the Government know what their new mill is capable of extracting and what the approx. percentage of Lead and Zinc in the ore is likely to be. The Government moves slowly and it takes weeks to settle what could be settled in days. Unless the scheme is finally turned down, after the verbal promises made, we shall commence to break Zinc-Lead Ore during July.

MILL. In good order.

RODDERUP MINE. During June 400 Tons were mined and milled in the 19 days worked, and 39.85 Tons of Galena Concentrates produced. The percentage recovery was 9.96%. These figures compare with 380 Tons in May, 30.50 Tons of Concentrates, and 8.02% recovery. The higher grade ore mined was from pillars taken out in the good flats mined in 1941 and which were left to support the roof.

This higher percentage may not be maintained.

MILL. In good working order.

### SALES OF ORE ETC.

Lead Ore. No change in these. Sales are confined to The British Pyros White Lead Co. Ltd., West Drayton, and Messrs. Walkers Parker & Co., Newcastle.

Fluor Spar. 23 Tons was sold during the month.

Stones & Gravel. Only 104.75 Tons of gravel was sold at the usual price per ton. We are likely to sell more in the near future.

GENERAL. Many interviews have taken place and much correspondence passed between Government Engineers and Departments during the month, but no settlements have yet been reached. After 8 months during which the



N.F.M.D. Control have written and sent Engineers to discuss the use of the Heap End Shed for a garage for their motor lorries, I have been unable to get them to settle anything. The corrugated iron was perishing, and according to the N.F.M.D. Control it would cost £200 to repair the shed. The metal parts were deteriorating and after two months' correspondence and delay, I accepted an offer for the Shed of £500 from the Alston Foundry Co. who have bought the shed and paid a deposit of £50, the balance to be paid when they remove the shed, which they will do at their expense.

Altogether since last reported, Scrap Iron from Rampgill, including what was made into scrap by the actions of the N.F.M.D. people, amounting to 32 Tons 10 cwt. 3 qtrs., has been sold to D. Sep. Bowran Ltd for £91. 13. 10., while channel iron, girders, "H" iron etc. suitable for re-erection, sold to Ventners Hall Collieries Ltd., Haltwhistle amounted to 60 Tons 7 cwt. 2 qtrs. for £513. 3. 9. These accounts have not yet been paid. The shed sold for £500 is additional.

JUNE 1943.

N e n t s b u r y  
@@@@@@@@@@@@@@@@

M i n e.  
@@@@@@@

Development Footage: Nil.

H. Kielty & Partners.

104½ Days worked.

Vein.

|                   | L    | H  | S.F.  | S.M.    | W.   | C.F.  | C.M.    |               |
|-------------------|------|----|-------|---------|------|-------|---------|---------------|
| Liverick heading. | 15 x | 8  | - 120 | - 11.15 | x 6  | - 720 | - 20.39 | H.Kielty      |
| " Stope N.        | 6 x  | 12 | - 72  | - 6.69  | x 6  | - 432 | - 12.23 | A.Barron      |
| " " S.            | 6 x  | 8  | - 48  | - 4.46  | x 10 | - 480 | - 13.59 |               |
| " heading         | 26 x | 6  | - 156 | - 14.49 | x 6  | - 936 | - 26.50 | J.G.Armstrong |
| " "               | 15 x | 5  | - 75  | - 6.97  | x 6  | - 450 | - 12.74 |               |

3018 - 85.45 @ Days Wages

Tonnage to Mill:- 252 Tons

Wages Paid:- £101: -: 4.

Cost per Cu.M.:- 23s/8d.

---

R o d d e r u p  
@@@@@@@@@@@@@@@@

M i n e.  
@@@@@@@@

Development Footage: Nil.

West Flats  
@@@@@@@@ @@@@@@@@@

J. Johnston & Partners.

126 Days Worked.

Flat.

|             | L    | W  | S.F.  | S.M.    | H.  | C.F.   | C.M.    |              |
|-------------|------|----|-------|---------|-----|--------|---------|--------------|
| No.2 Bottom | 6 x  | 17 | - 102 | - 9.47  | x 6 | - 612  | - 17.33 |              |
| Pillars     | 31 x | 10 | - 310 | - 28.80 | x 6 | - 1860 | - 52.66 |              |
| "           | 20 x | 9  | - 180 | - 16.72 | x 6 | - 1080 | - 30.58 | @ Days Wages |
| "           | 25 x | 10 | - 250 | - 23.23 | x 6 | - 1500 | - 42.04 |              |

5052 - 143.04

Tonnage to Mill:- 400 Tons

Wages Paid:- £121: 19: 7.

Cost per Cu.M.:- 17s/1d.

MINE STATISTICS June 1943

| Tons of Ore Mined. |  |  | Cubic Metres Cut |  |  | Tons per Cubic Metre |  |  | Days Worked. |  |  |  |  |  | Tons per Miner's Day |  |  | Per Underground Man |  |  | Wages paid per Miner's Day |  |  | Wages paid per Underground Man |  |  | Wages paid per Cubic Metre |  |  | No. of Drills Working |  |  | Dynamite |  |  |  |
|--------------------|--|--|------------------|--|--|----------------------|--|--|--------------|--|--|--|--|--|----------------------|--|--|---------------------|--|--|----------------------------|--|--|--------------------------------|--|--|----------------------------|--|--|-----------------------|--|--|----------|--|--|--|
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |
|                    |  |  |                  |  |  |                      |  |  |              |  |  |  |  |  |                      |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |  |          |  |  |  |

# COMPARATIVE STATEMENT.

Nentsbury ..... Rodderup .....

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 88           | 24/10         | 206          | 15/1          |
| February  | 107          | 13/10         | 177          | 14/7          |
| March     | 43           | 24/8          | 212          | 14/10         |
| April     | 134          | 15/5          | 184          | 15/5          |
| May       | 180          | 13/3          | 134          | 17/5          |
| June      | 85           | 28/5          | 145          | 20/10         |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Nentsbury ..... Tons in Deaths .....

Rodderup ..... Tons in Deaths .....

## Report of the Nenthead Mines July 1943

### REPORT of the NENTHEAD MINES.

JULY 1943

|                        | <u>Nentsbury.</u> | <u>Rampgill.</u>        | <u>Rodderup.</u> | <u>Totals.</u>     |
|------------------------|-------------------|-------------------------|------------------|--------------------|
| Ore Mined              | ZnPb. 135 Tons    | Requisitioned           |                  | 670 Tons           |
| " "                    | Pb. 130 "         | by the Non-             | 405 Tons }       |                    |
| Ore Milled             | 130 Tons          | Ferrous Mineral         | 405 "            | 535 "              |
| Concs. prdcd.          | 9.6 Tons          | Development Ltd. (Govt. | 36.6 "           | 46.2 "             |
| % of Galena            | 7.39%             | controlled).            | 9.01%            | N. 7.39% R. 9.01%  |
| Hours worked           | 33 hrs.           |                         | 81 hrs.          | 33 hrs. 81 hrs.    |
| Tons per hour          | 3.94 Tons         |                         | 5.0 Tons         | 3.94 Tons 5.0 Tons |
| Zinc-Lead Ore in stock | 135 Tons          |                         |                  | 135 Tons           |

#### STOCKS.

|                                             | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|---------------------------------------------|-------------------|------------------|------------------|----------------|
| Crude Ore                                   | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende-Witherite                            | 50 Tons           | 150 Tons         | Nil.             | 200 "          |
| GALENA at Nentsbury, including Potters Ore, |                   |                  |                  | 19.891 Tons    |
| " " Rodderup, " " " "                       |                   |                  |                  | 34.430 "       |

Fluor Spar despatched 12.10 Tons.

Zinc-Lead Ore in stock at Nentsbury, 135 Tons for N.F.M.D.Ltd.

Compressed Air produced at Nenthead, from Water Power about 600 cu.ft. per min. at a pressure of 70 lbs. sq. inch at face.

Compressed Air produced at Rodderup, from Electrical Energy and Water Power, approx. 750 cu.ft. per min at a pressure of 80-85 lbs per sq. inch at face.

Note: Messrs. Morris Ashby Ltd.'s stock of Lead Ore at Rodderup in kegs remains at 16.50 Tons for which they have paid.

## NENTHEAD MINES JULY 1943

NENTSBURY MINE. From July 1st to July 17th, Lead Ore was mined and the forebreasts and heading cleaned up. The quantity was 130 Tons, and the yield which included the cleaning of the rises was 9.6 Tons of Concentrates. The percentage recovery was 7.39% The percentage was actually higher than the grade of ore broken, it included all the sweepings of fine Lead Ore in the rises. From the 19th to the 30th July the miners were employed breaking Zinc-Lead Ore from S1 Vein for a trial parcel-of 500 Tons for the N.F.M.D. Ltd, who have, in writing, agreed to purchase the £000 Tons.

MILL. In good order.

RODDERUP MINE. During July 405 Tons of ore was broken and milled. The recovery therefrom amounted to 36.6 Tons of Concentrates, the percentage recovery being 9.01%. It is not likely that the above percentage will be maintained because we have now removed all the good ore in the pillars, left in the Western end of the Flats worked in 1940 and 1941, and in future the main supply for the Mill will be broken from Flats near the bottom of the Incline going in an Easterly direction. Only by experiment can we find out what the actual value of the ore in this area will be. When the Flats are developed, the quantity of ore broken should increase.

MILL. In good order.

### SALES OF ORE ETC.

Lead Ore. Sales have been made to the British Pyros White Lead Co., West Drayton, and to Walkers Parker & Co., Ltd., Newcastle.

Fluor Spar. 12.1 Tons were sold during July. It is becoming difficult to produce Fluor Spar without washing, of sufficiently high quality of Calcium Fluoride and low enough Silica content to satisfy the smelters.

Gravel. Only 95.45 Tons were sold during the month. The demand has fallen off somewhat and the Government restriction of petrol is handicapping deliveries.

GENERAL. It is not possible to reproduce all the correspondence and results of interviews with Government officials and our Solicitors during the month of July. Copies of all these will be found in our files. I have kept in touch with Mr. Hallett and had advice from Messrs. Blackburn & Main the Co.'s solicitors, but up to date, although promised, we have not arrived at a final agreement.

The N.F.M.D. Ltd. commenced testing their new plant on or about July 15th and had a supply of water from our source for the purpose. On or about July 20th they commenced operations 24h hours daily. The agreement arranged is that the N.F.M.D. Ltd pay the V.M. Co. £375 per annum for 500 gallons of water per minute and to pay the cost of fuelling one Ruston Hornsby Engine to drive Compressors for supplying Nentsbury with Compressed Air when the water supply fails. No written agreement has yet been signed. The Controller on Aug. 10th told me the delay was due to pressure of work on the Law Officers of the Crown. I do not know what results the N.F.M.D. Co. are obtaining from the treatment of the dumps.

JULY 1943.

N e n t s b u r y      M i n e  
@@@@@@@@@@@@@@@@ @@@@@@@@

Development Footage: Nil.

H. Kielty & Partners.

74½ days worked.

1st Sun Vein.

|            | L  | W    | S.F.  | S.M.    | H.  | C.F.  | C.M.    |                |
|------------|----|------|-------|---------|-----|-------|---------|----------------|
| Rise       | 9  | x 8  | - 72  | - 6.69  | x 9 | - 648 | - 18.35 | H. Kielty      |
| Forebreast | 11 | x 10 | - 110 | - 10.22 | x 7 | - 770 | - 21.20 | A. Barron      |
| "          | 8  | x 8  | - 72  | - 6.68  | x 7 | - 504 | - 14.27 | J.C. Armstrong |

1922 - 54.42 @ Days Wages

Tonnage to Mill:- 135 Tons (Zinc-Lead Ore)

Wages paid: £51.10.5.

Cost per Cu.M.:- 18/11.

Note: The above relates only to the time spent on mining Zinc-Lead Ore.  
Up to July 16th, the miners were engaged in cleaning up the Lead  
Ore Rises etc. etc.

R o d d e r u p      M i n e.  
@@@@@@@@@@@@@@@@ @@@@@@@@

Development Footage: Nil.

J. Johnston & Partners.

200 days worked.

Flat.

|             | L  | W    | S.F.  | S.M.    | H.  | C.F.   | C.M.    |
|-------------|----|------|-------|---------|-----|--------|---------|
| No.2 Bottom | 11 | x 10 | - 110 | - 10.22 | x 6 | - 660  | - 18.69 |
| " " "       | 11 | x 11 | - 121 | - 11.24 | x 6 | - 726  | - 20.56 |
| Pillars     | 13 | x 8  | - 104 | - 9.66  | x 6 | - 624  | - 17.67 |
| "           | 40 | x 12 | - 480 | - 44.59 | x 6 | - 2880 | - 81.54 |
| "           | 28 | x 12 | - 336 | - 31.21 | x 6 | - 2016 | - 57.08 |

6906 - 195.54 @ Days Wages.

Tonnage to Mill:- 405 Tons

Wages Paid: £138. 4. 0.

Cost per Cu.M.:- 14/1½

# MINE STATISTICS

July 1943.

|           | Tons of Ore Mined.   |   |     | Cubic Metres Cut     |   |      | Tons per Cubic Metre |   |     | Days Worked.         |     |      |                      |      | Tons per Miner's Day |                      |      | Cubic Metres per Miner's Day |                      |       | Per Underground Man |                      |       | Wages paid per Miner's Day |                      |       | Wages paid per Underground Man |                      |       | Wages paid per Cubic Metre |                      | No. of Drills Working | Dynamite |              |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|-----------|----------------------|---|-----|----------------------|---|------|----------------------|---|-----|----------------------|-----|------|----------------------|------|----------------------|----------------------|------|------------------------------|----------------------|-------|---------------------|----------------------|-------|----------------------------|----------------------|-------|--------------------------------|----------------------|-------|----------------------------|----------------------|-----------------------|----------|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|           | Headings. Dev. Total |   |     | In Ore In Dead Total |   |      | In Ore In Dead Total |   |     | In Ore In Dead Total |     |      | In Ore In Dead Total |      |                      | In Ore In Dead Total |      |                              | In Ore In Dead Total |       |                     | In Ore In Dead Total |       |                            | In Ore In Dead Total |       |                                | In Ore In Dead Total |       |                            | In Ore In Dead Total |                       |          | lbs. per ton |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|           |                      |   |     |                      |   |      |                      |   |     |                      |     |      |                      |      |                      |                      |      |                              |                      |       |                     |                      |       |                            |                      |       |                                |                      |       |                            |                      |                       |          |              |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
| Nentsbury | 265                  | - | 265 | 5H                   | - | 4.90 | 75                   | - | 120 | -                    | 195 | 3.53 | 0.72                 | 1.81 | 0.83                 | 0.83                 | 1.40 | 0.65                         | 0.27                 | 13/10 | -                   | 13/10                | 13/11 | 13/11                      | 13/11                | 13/11 | 13/11                          | 13/11                | 13/11 | 13/11                      | 13/11                | 13/11                 | 13/11    | 13/11        | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 | 13/11 |

## COMPARATIVE STATEMENT.

\*..... Nentsbury ..... \*..... Rodderup ..... \*

Nentsbury ..... Tons in Dead .....  
Rodderup ..... Tons in Dead .....

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

| ... | Mos. Av. |
|-----|----------|
| ... | ...      |
| ... | ...      |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 88           | 24/10         | 200          | 15/1          |
| February  | 167          | 13/10         | 177          | 14/7          |
| March     | 93           | 29/8          | 212          | 14/6          |
| April     | 134          | 18/5          | 184          | 15/5          |
| May       | 180          | 13/3          | 184          | 17/5          |
| June      | 85           | 28/8          | 143          | 21/0          |
| July      | 54           | 40/10         | 195          | 15/10.        |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

\* Owing to clearing up the dead Ore river, etc. before commencing to break the hard dead-fire Ore, on July 10<sup>th</sup> 1943, the figures for Nentsbury have been adjusted. The actual cost for Cu. metre cut in Nentsbury, that is line & column that only a breaking hard dead-fire Ore, is 24/10.

## Report of the Nenthead Mines August 1943

### REPORT OF THE NENTHEAD MINES.

AUGUST 1943.

|                               | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u>           |
|-------------------------------|-------------------|------------------|------------------|--------------------------|
| Ore Mined                     | 294 Tons          | Requisit-        | 363 Tons         | 657 Tons                 |
| Ore Milled                    | 130 "             | ioned by         | 363 "            | 493 "                    |
| Lead Concs. Prdcd.            | 0.25 "            | N.F.M.D.         | 28.5 "           | 28.75 "                  |
| % of Galena                   | 0.0189%           | Control.         | 7.85%            | 0.0189% N 7.85% R.       |
| Hours Worked                  | 36 hours          |                  | 75 hours         | 36 hrs. N 75 hrs. R.     |
| Tons per hour                 | 3.61 Tons         |                  | 4.84 Tons        | 3.61 Tons N 4.84 Tons R. |
| Zinc-Lead Ore in stock        | 299 "             |                  |                  | 299 Tons.                |
| Pb-Zn-BaCO <sub>3</sub> Concs | 55 "              |                  |                  | 55 "                     |
| Yield %                       | 42.3%             |                  |                  | 42.3%                    |

### STOCKS.

|                                             | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|---------------------------------------------|-------------------|------------------|------------------|----------------|
| Crude Ore                                   | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende-Witherite                            | 50 Tons           | 150 Tons         | Nil.             | 200 "          |
| Galena at Nentsbury, including Potters Ore, |                   |                  |                  | 9.331 Tons     |
| " " Rodderup,                               |                   |                  |                  | " , 34.329 "   |
| Lump Witherite at Nentsbury                 |                   |                  |                  | 4 Tons         |
| Pb-Zn. Ore stock at Nentsbury for N.F.M.D   |                   |                  |                  | 299 "          |
| Rich & Poor                                 | " " Concs. "      | " " "            | " " "            | 55 "           |
| Fluor Spar produced - Nil.                  |                   |                  |                  |                |

COMPRESSED AIR produced at Nenthead from Water Power, 600 cu.ft. per minute at a pressure of 75 lbs. per square inch at the face.

COMPRESSED AIR produced at Rodderup from Electrical Energy and Water Power approx. 750 cu.ft. per minute at a pressure of 80/85 lbs per sq. inch at the face.

NOTE: The stock of Lead Ore at Rodderup in kegs for which Messrs. Morris Ashby Ltd have paid, is 16.50 Tons. It is stored at Messrs. Ashby's risk.



## **NENTHEAD MINES**

### **AUGUST 1943**

NENTSBURY MINE. During August, 294 Tons of Zinc-Lead-Witherite Ore was mined, of which 130 Tons was milled at the request of the N.F.M.D. Ltd. The percentage of Lead recovered was very small and amounted to only 0.25 Tons, or 0.0189%.

From the 130 Tons crushed, 55 Tons of concentrates were recovered, of which 30 Tons was described as rich, 25 Tons as poor. The total percentage of recovery was 42.3%. These tests were made to determine what advantage would be gained by milling and concentrating the ore. There was also 4 Tons of lump Witherite picked out. The stock of Mine ore at Nentsbury to be offered to N.F.M.D. Ltd., was 299 Tons. This will be brought up to 500 Tons as soon as possible when N.F.M.D. Ltd will take samples with the V.M. Co. and endeavour to arrange a price per ton.

MILL. In fair running order.

RODDERUP MINE. During the month, 363 Tons of ore was mined and crushed. The amount of Concentrates recovered was 28.50 Tons, equals 7.85% recovery. There was a fall in the quantity of ore mined and milled, and in the percentage of Galena recovered. This was partly caused by removing the miners from the Western end of the Central Flats, where, for over two years, good ore was mined, to Flats heading East, just under the Incline. The object was to get more ore from the small number of miners employed and to cut down tramming costs. I expect an improvement in tons per man per day, and in the grade of ore during September. The small number of miners both in Nentsbury and Rodderup, owing to war demands, is putting up the cost of Standing Charges.

MILL. In good running order.

#### **SALES OF ORE ETC.**

Lead Ore. One parcel of 35.411 Tons was sold to the Pyros White Lead Co., London. This Co. who have purchased our good quality Lead Ore for some time, has intimated that owing to acute shortage of labour, they have had to close their works part time. This will be a loss to the V.M. Co. as although we can sell all the Lead Ore we can produce, to Walkers Parker & Co., Newcastle, the price paid by Pyros was more remunerative.

Fluor Spar. None sold,

Gravel. Although there is a big demand for our gravel, the recent restriction imposed by the Government, whereby hauliers are restricted to a 30 mile radius, prevents delivery of our material to aerodromes which are about 50 miles away. We have some 500 Tons in stock.

GENERAL. Meetings have continued during the month at Nenthead, Alston, and Carlisle, and substantial claims will be submitted by the V.M. Co. before the end of October, for dumps requisitioned by the Government for the N.F.M.D.



Control, and for machinery removed and damaged from Rampgill Mill Building. Claims for rent and use of the water, have been submitted, and the Government Depts. concerned are considering these. Copies of all important claims and correspondence are in our files at Nenthead, with Mr. Hallett in London, and with Messrs. Blackburn & Main, Carlisle. Endless correspondence entailing much labour and intricate calculations, especially as to the claim for the dumps where we have had to review 21 years of output and sales. The Government Valuers admitted that they have not had to deal with a similar case in this country. We are doing our utmost to obtain as much as possible for the V.M. Co.

AUGUST 1943.

Nentsbury  
@@@@@@@@@@@@@@

Mine.  
@@@@@@@@

Development Footage: Nil.

J. G. Armstrong & Partners.

113½ Days Worked.

1st. Sun Vein.

|               | L       | H | S.F. | S.M. | H          | C.F. | C.M.   | Deduct               |
|---------------|---------|---|------|------|------------|------|--------|----------------------|
| J.G.Armstrong | 15 x 15 | - | 225  | -    | 20.91 x 8  | -    | 1800 - | 050.97               |
| A. Barron     | 22 x 12 | - | 264  | -    | 24.53 x 11 | -    | 2904 - | 082.22               |
| H. Kielty     | 22 x 8  | - | 176  | -    | 16.35 x 11 | -    | 1936 - | 54.82                |
|               |         |   |      |      |            |      | 6640 - | 188.01               |
|               |         |   |      |      |            |      | 1418 - | 40.15                |
|               |         |   |      |      |            |      | 5222 - | 147.86 @ Days wages. |

Tonnage to Mill:- 294

Wages Paid: £80. 4. 9.

Cost per Cu.M.: 10/10.

---

Rodderup  
@@@@@@@@@@@@@@

Mine.  
@@@@@@

Development Footage: Nil.

West Flats.

J. Johnston & Partners.

187 Days Worked.

| Flat    | L       | W | S.F. | S.M. | H.        | C.F. | C.M.         |
|---------|---------|---|------|------|-----------|------|--------------|
| No.2    | 10 x 15 | - | 150  | -    | 13.93 x 6 | -    | 900 - 25.48  |
| " "     | 11 x 15 | - | 165  | -    | 15.33 x 6 | -    | 990 - 28.03  |
| " "     | 11 x 9  | - | 99   | -    | 9.20 x 6  | -    | 594 - 16.82  |
| Pillars | 20 x 9  | - | 180  | -    | 16.72 x 6 | -    | 1080 - 30.58 |
| " "     | 28 x 8  | - | 224  | -    | 20.81 x 6 | -    | 1344 - 38.05 |

Rise E. & Strings.

|       |        |   |    |   |           |   |               |
|-------|--------|---|----|---|-----------|---|---------------|
| Drift | 12 x 7 | - | 84 | - | 7.80 x 7  | - | 588 - 16.65   |
| Rise  | 8 x 6  | - | 48 | - | 4.46 x 10 | - | 4460 - 13.59  |
|       |        |   |    |   |           |   | 5976 - 169.20 |

Tonnage to Mill: 363

Wages Paid: £129. 13. 3.

Cost per Cu.M.: 15/4.

# MINE STATISTICS

August 1943

|           | Tons of Ore Mined. |      | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked. |          |            |       |        |       | Tons per Miner's Day |       | Cubic Metres per Miner's Day |       | Wages paid per Miner's Day |      | Wages paid per Underground Man |          | Wages paid per Cubic Metre |          | Wages paid per ton of Ore |                       | Dynamite |         |      |
|-----------|--------------------|------|------------------|----------|-------|----------------------|----------|-------|--------------|----------|------------|-------|--------|-------|----------------------|-------|------------------------------|-------|----------------------------|------|--------------------------------|----------|----------------------------|----------|---------------------------|-----------------------|----------|---------|------|
|           | Headings.          | Dev. | In Ore           | In Deads | Total | In Ore               | In Deads | Total | In Ore       | In Deads | Bar. Wages | Total | In Ore | Total | In Ore               | Total | In Ore                       | Total | Headings                   | Dev. | Total                          | Headings | Total                      | Headings | Total                     | No. of Drills Working | lbs.     | per ton |      |
|           |                    |      |                  |          |       |                      |          |       |              |          |            |       |        |       |                      |       |                              |       |                            |      |                                |          |                            |          |                           |                       |          |         |      |
|           |                    |      |                  |          |       |                      |          |       |              |          |            |       |        |       |                      |       |                              |       |                            |      |                                |          |                            |          |                           |                       |          |         |      |
| Nentsbury | 29H                | -    | 29H              | -        | 148   | 200                  | -        | 200   | 113          | -        | 50         | -     | 103    | -     | 260                  | 131   | 180                          | 0.91  | 141                        | -    | 141                            | 131      | 145                        | 145      | 73                        | 3                     | 180      | 0.61    |      |
| 1. Mos Av | 205                | -    | 205              | -        | 114   | 257                  | -        | 257   | 137          | -        | 54         | -     | 191    | -     | 200                  | 083   | 140                          | 0.60  | 131                        | -    | 131                            | 131      | 2512                       | 2512     | 92                        | 3                     | 225      | 0.84    |      |
| 5. Mos Av | 271                | -    | 271              | -        | 118   | 230                  | -        | 230   | 134          | -        | 54         | -     | 188    | -     | 202                  | 088   | 144                          | 0.63  | 131                        | -    | 131                            | 131      | 2310                       | 2310     | 811                       | 3                     | 219      | 0.81    |      |
| Rodderup  | 303                | -    | 303              | -        | 169   | 215                  | -        | 215   | 137          | -        | 25         | -     | 212    | -     | 194                  | 104   | 0.90                         | 171   | 0.80                       | 131  | -                              | 131      | 175                        | 175      | 81                        | 4                     | 330      | 0.92    |      |
| 1. Mos Av | 421                | -    | 421              | -        | 185   | 227                  | -        | 227   | 170          | -        | 51         | -     | 221    | -     | 248                  | 108   | 108                          | 0.84  | 141                        | -    | 141                            | 1310     | 1310                       | 103      | 72                        | 4                     | 270      | 0.64    |      |
| 8. Mos Av | 414                | -    | 414              | -        | 153   | 210                  | -        | 210   | 172          | -        | 48         | -     | 220    | -     | 240                  | 102   | 102                          | 0.83  | 141                        | -    | 141                            | 1310     | 1310                       | 103      | 105                       | 73                    | 4        | 278     | 0.67 |

## COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱..... Rodderup .....✱

Nentsbury      Tons in Deads      Rodderup      Tons in Deads

Wages paid per Cubic Metre in Headings as suggested in 5 year letter of 3rd June, 1932.

Nentsbury

|            |  |
|------------|--|
| ..Mos. Av. |  |
| ..Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 88           | 24/10         | 206          | 15/1          |
| February  | 167          | 13/10         | 177          | 14/7          |
| March     | 43           | 29/5          | 212          | 14/10         |
| April     | 134          | 18/5          | 184          | 15/5          |
| May       | 130          | 13/5          | 184          | 17/5          |
| June      | 85           | 28/8          | 143          | 21/10         |
| July      | 54           | 40/10         | 195          | 15/10         |
| August    | 148          | 14/5          | 109          | 17/5          |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report of Nenthead Mines September 1943

### REPORT on the NENTHEAD MINES.

SEPTEMBER 1943.

|                         | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------------|-------------------|------------------|------------------|----------------|
| Ore Mined               | 290 Tons          | Taken by         | 350 Tons         | 640 Tons       |
| Ore Milled              | Nil.              | N.F.M.D.<br>Ltd. | 350 "            | 350 "          |
| Lead Concs. prdcd.      | "                 |                  | 31.25 "          | 31.25 "        |
| % of Galena             | "                 |                  | 8.92%            | 8.92%          |
| Hours Worked            | "                 |                  | 72 hrs           | 72 hrs         |
| Tons per hour           | "                 |                  | 4.86 Tons        | 4.86 Tons      |
| Pb-Zn Ore in stock      | 589 Tons          |                  | Nil              | 589 "          |
| BaCO <sub>3</sub> " " " | 7.25 "            |                  | "                | 7.25 "         |

#### STOCKS.

|                                                                       | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------------------------------------------------------------------|-------------------|------------------|------------------|----------------|
| Crude Ore                                                             | Nil               | Nil              | 2500 Tons        | 2500 Tons      |
| Blende-Witherite                                                      | 50 Tons           | 150 Tons         | Nil.             | 200 "          |
| Galena, at Nentsbury, Nil.                                            |                   |                  |                  |                |
| " " Rodderup, 49.169 Tons                                             |                   |                  |                  |                |
| <u>Witherite</u> , in stock & sold for approx. £4. 5.0. per ton nett, |                   |                  |                  | 7.25 Tons.     |
| <u>Nentsbury Mine Ore</u> in stock for N.F.M.D., 589 Tons.            |                   |                  |                  |                |
| <u>Fluor Spar</u> sold Nil.                                           |                   |                  |                  |                |

Compressed Air produced at Nenthead, from Water Power, approx. 600 cu.ft. per minute at a pressure of 75/80 lbs. at face.

Compressed Air produced at Rodderup. from Electrical Energy & Water Power about 750 cu.ft. per minute at a pressure of 80/85 lbs. at face.

NOTE: The quantity of Lead Ore in Kegs, sold to Messrs. Morris Ashby, Ltd., London, and in stock at their risk at Rodderup, is unchanged. Owing to shipping difficulties, they are not able to despatch it at present.

## **NENTHEAD MINES SEPTEMBER 1943**

NENTSBURY MINE. During September, 290 Tons of Zinc-Lead- Witherite ore was mined and transported to the heap outside Nentsbury for N.F.M.D. Ltd. The total quantity at the end of September, in stock, was 589 Tons. No milling was done during the month, as it did not seem from the results obtained in August that it was an economic proposition. A sample taken by us and assayed by Messrs. Michie & Davidson, Newcastle, gave 9.08% Zn and 1.24% Pb. The N.F.M.D. cannot recover Witherite, and consequently we have hand-picked as much as possible of the lump ore, and had a sample assayed which yielded over 92% BaCC3. Messrs. Athole G. Allen Ltd., offered us £5. 5. 0. per ton for this ore delivered Stockton-on-Tees. The cost of transport will amount to about £1. 0. 0. per ton. We have accepted this offer, and shall despatch the ore next month when we have a 10-ton parcel. If we can obtain a reasonable price for the Zinc-Lead Ore, this, with the Witherite sales, should meet the cost of mining at Nentsbury. The milling of Fluor Spar dumps at Nentsbury will have to be considered immediately a decision has been reached with the N.F.M.D. for the Mine Ore.

MILL. Maintained in good order.

RODDERUP MINE. During the month 350 Tons of ore from the Central Flats going E. just under the incline, was mined and milled. The recovery of concentrates amounted to 31.25 Tons, or 8.92 %. In this area we have cut several small faults, and the grade of ore has varied from week to week. In consequence the tons per man per day, have dropped, more picking has had to be done, and the grade being lower the output towards the end of the month dropped.

The main cause of anxiety is the small number of miners employed and the high Standing Charges. I have asked the G.H.E. to make the V.M. Co. a grant of £500 for 1943 to meet the cost of keeping the mine working.

Should we close the mine, the Government may immediately take control and remove all machinery and plant to other mines without paying anything like the market value for it. The running of a metalliferous mine in England under war conditions is an uncomfortable and difficult task.

MILL. In good order.

### SALES OF ORE ETC.

Gravel. 235.9 Tons sold during the month, at the usual prices.

Fluor Spar. None sold.

Lead Ore. Owing to labour scarcity, the Pyros White Lead Co. have not bought any ore. Consequently, we have lost temporally, and possibly for the duration of the war. This Co. paid us a good price for 1/3 and 3/5 mm. ore. We are obliged to sell to Messrs. Walkers Parker at a much lower price.

GENERAL. After many interviews with Messrs. Blackburn & Main, meetings with N.F.M.D. engineers, and consultations with Mr. Hallett, I prepared in detail a claim for £49609. 10. 1. to be lodged with the Government for the dumps requisitioned by them, and for heaps of Zinc tailings amounting to 3750 Tons, lying thereon. This claim, in duplicate, will be prepared in legal form by Messrs, Blackburn & Main, and sent to the dept. concerned in October. The claim must be submitted by Oct. 23rd. A further claim will be prepared for damage to machinery in Rampgill by N.F.M.D., and demolition of same and alteration of the Building etc. It will take much time and thought to prepare the claim, and only with the help of a Solicitor can it be made out. The various Acts of Parliament, since war commenced, make it impossible for an Engineer, however capable, to prepare the claim without consulting a Solicitor. Claims have also been made for the rent of the Buildings and for the use of the Water. Some of the claims may have to go before a Government Tribunal, to show in detail how the amounts have been arrived at etc. etc. Full details are in our files at Nenthead with Messrs, Blackburn & Main, and with Mr. Hallett in London. The outlook is not bright at present, owing to scarcity of labour, the falling off in the grade of the ore, and the high cost of labour and materials. There is, however, not alternative to closing down, and that, in my opinion, would be a much more serious loss to the Company.

SEPTEMBER ~~XXXX~~ 1943.

N e n t s b u r y

@@@@@@@@@@@@@@@@

M i n e.

@@@@@@@@

Development Footage: Nil.

1st Sun Vein - Mixed Ore.

A. Barron & Partners.

| L             | H | S.F. | S.M. | W        | C.F.   |      | C.F. | C.F.   | C.M.    |                |
|---------------|---|------|------|----------|--------|------|------|--------|---------|----------------|
| 29 x 12       | - | 348  | -    | 32 x 14  | - 4872 | less | 2904 | - 1938 | - 55.72 | A. Barron      |
| 14 x 9        | - | 126  | -    | 11.7 x 8 | - 1008 | "    | ---- | - 1008 | - 28.54 | J.G. Armstrong |
| 30 x 9        | - | 270  | -    | 25 x 14  | - 3780 | "    | 1178 | - 2602 | - 73.67 | H. Kielty      |
| 5578 - 157.93 |   |      |      |          |        |      |      |        |         |                |

125½ Days Worked.

Tonnage to Mill:- 290

Wages Paid £86. 11. 1.

Cost per Cu.M.:- 10/11½.

---

R o d d e r u p

@@@@@@@@@@@@@@@@

M i n e.

@@@@@@@@

Development Footage: Nil.

J. Johnston & Partners.

| Flat.         | L       | W | S.F. | S.M. | H         | C.F.   | C.M.    |
|---------------|---------|---|------|------|-----------|--------|---------|
| No. 2         | 14 x 26 | - | 364  | -    | 33.81 x 6 | - 2184 | - 61.84 |
| " "           | 19 x 15 | - | 342  | -    | 31.77 x 6 | - 2052 | - 58.10 |
| " "           | 14 x 15 | - | 210  | -    | 19.51 x 6 | - 1260 | - 35.68 |
| 5496 - 155.62 |         |   |      |      |           |        |         |

184 Days Worked.

Tonnage to Mill:- 350

Wages Paid: £127. 9. 11.

Cost per Cu.M.:- 16/4½

| MINE STATISTICS    |      |       |                  |         |       |                      |         |       |              |         |       |           |         | 1943  |                     |       |                            |       |                                |         |                            |          |                       |          |          |       |         |       |       |
|--------------------|------|-------|------------------|---------|-------|----------------------|---------|-------|--------------|---------|-------|-----------|---------|-------|---------------------|-------|----------------------------|-------|--------------------------------|---------|----------------------------|----------|-----------------------|----------|----------|-------|---------|-------|-------|
| September          |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                     |       |                            |       |                                |         |                            |          |                       |          |          |       |         |       |       |
| Tons of Ore Mined. |      |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |       | Days Worked. |         |       |           |         |       | Per Underground Man |       | Wages paid per Miner's Day |       | Wages paid per Underground Man |         | Wages paid per Cubic Metre |          | No. of Drills Working |          | Dynamite |       |         |       |       |
|                    |      |       |                  |         |       |                      |         |       | Miners       |         |       | Labourers |         |       |                     |       |                            |       |                                |         |                            |          |                       |          |          |       |         |       |       |
| Headings.          | Dev. | Total | In Ore           | In Dead | Total | In Ore               | In Dead | Total | In Ore       | In Dead | Total | In Ore    | In Dead | Total | Bar.                | Wages | gains                      | Total | In Ore                         | In Dead | Total                      | Headings | Total                 | Headings | Total    | lbs.  | per ton |       |       |
|                    |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                     |       |                            |       |                                |         |                            |          |                       |          |          |       |         |       |       |
| Nentsbury          |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                     |       |                            |       |                                |         |                            |          |                       |          |          |       |         |       |       |
| 290                | -    | 290   | 158              | -       | 158   | 125                  | -       | 125   | 114          | -       | 114   | 232       | 232     | 12/6  | -                   | 13/10 | 13/10                      | 13/10 | 13/10                          | 13/10   | 13/10                      | 13/10    | 13/10                 | 13/10    | 13/10    | 13/10 | 855     | 1.22  |       |
| 6 Mos Av           |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                     |       |                            |       |                                |         |                            |          |                       |          |          |       |         |       |       |
| 271                | -    | 271   | 118              | -       | 118   | 134                  | -       | 134   | 54           | -       | 54    | 202       | 202     | 0.88  | 0.88                | 13/11 | 13/11                      | 13/11 | 13/11                          | 13/11   | 13/11                      | 13/11    | 13/11                 | 13/11    | 13/11    | 13/11 | 214     | 0.81  |       |
| 9 Mos Av           |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                     |       |                            |       |                                |         |                            |          |                       |          |          |       |         |       |       |
| 273                | -    | 273   | 122              | -       | 122   | 133                  | -       | 133   | 50           | -       | 50    | 205       | 205     | 0.92  | 0.92                | 13/11 | 13/11                      | 13/11 | 13/11                          | 13/11   | 13/11                      | 13/11    | 13/11                 | 13/11    | 13/11    | 13/11 | 227     | 0.85  |       |
| Rodderup           |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                     |       |                            |       |                                |         |                            |          |                       |          |          |       |         |       |       |
| 350                | -    | 350   | 150              | -       | 150   | 184                  | -       | 184   | 22           | -       | 22    | 190       | 190     | 0.85  | 0.85                | 13/10 | 13/10                      | 13/10 | 13/10                          | 13/10   | 13/10                      | 13/10    | 13/10                 | 13/10    | 13/10    | 13/10 | 13/10   | 13/10 | 13/10 |
| 8 Mos Av           |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                     |       |                            |       |                                |         |                            |          |                       |          |          |       |         |       |       |
| 114                | -    | 114   | 183              | -       | 183   | 172                  | -       | 172   | 48           | -       | 48    | 240       | 240     | 1.06  | 1.06                | 14/-  | 14/-                       | 14/-  | 14/-                           | 14/-    | 14/-                       | 14/-     | 14/-                  | 14/-     | 14/-     | 14/-  | 14/-    | 14/-  | 14/-  |
| 9 Mos Av           |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                     |       |                            |       |                                |         |                            |          |                       |          |          |       |         |       |       |
| 1107               | -    | 1107  | 181              | -       | 181   | 173                  | -       | 173   | 45           | -       | 45    | 235       | 235     | 1.00  | 1.00                | 14/-  | 14/-                       | 14/-  | 14/-                           | 14/-    | 14/-                       | 14/-     | 14/-                  | 14/-     | 14/-     | 14/-  | 14/-    | 14/-  | 14/-  |

# COMPARATIVE STATEMENT.

✱..... Nentsbury ✱..... Rodderup ✱.....

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 88           | 24/10         | 206          | 15/1.         |
| February  | 107          | 13/10         | 177          | 14/7          |
| March     | 93           | 29/8          | 212          | 14/10         |
| April     | 134          | 18/5          | 184          | 15/5          |
| May       | 180          | 13/3          | 184          | 17/5          |
| June      | 35           | 28/5          | 143          | 21/10         |
| July      | 54           | 16/10         | 195          | 15/10         |
| August    | 148          | 14/5          | 164          | 17/5          |
| September | 158          | 12/7          | 150          | 18/5          |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings in your letter of 3rd June, 1932.

Nentsbury

|            |  |
|------------|--|
| ..Mos. Av. |  |
| ..Mos. Av. |  |



## Report on the Nenthead Mines October 1943

REPORT on the NENTHEAD  
MINES.

OCTOBER 1943.

|                          | <u>Nentsbury.</u> | <u>Rampgill.</u>          | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------------|-------------------|---------------------------|------------------|----------------|
| Ore Mined                | 270 Tons          | Taken over<br>by N.F.M.D. | 365 Tons         | 635 Tons       |
| Ore Milled               | Nil               | Ltd.                      | 365 "            | 365 "          |
| Pb. Cons Prdcd.          | Nil.              |                           | 24 "             | 24 "           |
| % of Galena              | Nil               |                           | 6.3%             | 6.3%           |
| Hours Worked             | Nil               |                           | 76 hrs           | 76 hrs.        |
| Tons per hour            | Nil               |                           | 4.8 Tons         | 4.8 Tons       |
| Pb-Zn Ore in stock       | 859 Tons          |                           | Nil              | 859 "          |
| BaCO <sub>3</sub> prdcd. | 3.85 "            |                           |                  | 3.85 "         |

### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | 50 Tons           | 150 Tons         | Nil.             | 200 "          |

Note: To the above 200 Tons, further quantities of Middlings have been washed from previous low grade heaps and varying in assay value from 10.4% to 34.38%, and estimated in all to 170 Tons, making a total of 370 Tons offered to the N.F.M.D. Ltd.

Witherite: Sold, 10.8 Tons, In Stock, 0.3 Tons.

Nentsbury Mine Ore in Stock, 859 Tons.

Fluor Spar sold: Nil.

COMPRESSED AIR produced at Nenthead from Water Power, approx. 600 cu. ft. per minute, at 75 to 80 lbs. pressure at face.

COMPRESSED AIR produced at Rodderup from Electrical Energy and Water Power, about 750 cu.ft. per minute at a pressure of 80 to 85 lbs per square inch at face.

NOTE: Messrs. Morris Ashby Ltd. are arranging to remove part of the Lead Ore in stock at their risk at Rodderup. The ore in question has been paid for by Messrs. Ashby Ltd.

## NENTHEAD MINES OCTOBER 1943

NENTSBURY MINE. During October 270 Tons of Blende-Lead Ore, containing Witherite was mined and placed on the stock heap outside Nentsbury Mine for the N.F.F.D. Ltd.

The amount in stock at the end of the month was 859 Tons. Further talks with the Consulting Engineer and the Superintendent of this Company, on Oct. 23rd, in the V.M. Co.'s office, were held. These gentlemen promised to take the ore and indicated that the price per ton would be 15s/4d at their present cost of treatment. They stated the present cost was high, and they expected to be able to reduce the cost. If so, any decrease per ton would be added to the price they would pay. Letters have been written to the London Office and a statement prepared by us giving the approximate tonnage of this, and other middling heaps, with the assay values of each and the approximate costs of transport and treatment, but so far these have brought us no definite offer. A letter from the Assistant Controller in reply, stated that their Metallurgist (Mr. Wood), was carrying out experiments re: the treatment of the ore and the middlings, and when completed he would write us again.

During the month, 10 Tons 16 cwts of Hand-Picked Witherite was despatched from Alston Station to Messrs. Athole G. Allen Ltd., Stockton-on-Tees.

MILL. Idle but maintained in good condition.

RODDERUP MINE. During the month 365 Tons of ore was mined and crushed from the Central Flats going E. just under the Incline. The percentage recovered fell from 8.92% to 6.3%. A series of faults disturbed the mineralisation, and the rich ore, which in the western area was in the top of the limestone, has been thrown down into the bottom and below the level where the miners work.

The ore in the bottom to a depth of 3 to 9 feet below the floor of the level, is of good quality. It will however take at least 3 to 4 weeks to get this opened up, and in the meantime we have had to break ore not so good, with some of the miners, where such ore could be found. Unless something unforeseen occurs, the ore mined between now and the end of the year should improve in quality. The quantity (tons per man per day) may be less for some time as it will have to be twice handled.

MILL. In good order.

### SALES OF ORE ETC.

Lead Ore. All concentrates now being sold to Messrs, Walkers Parker & Co., Ltd.

Fluor Spar. None sold.

Gravel. Only 77 tons of gravel sold during month.

GENERAL. A claim prepared in detail by Messrs. Blackburn & Main, based on figures prepared by myself and approved by Mr. Hallett, was submitted to the Mineral Valuer, Leeds, by October 23rd. The claim is for £49,609. 10. 1. and



refers only to the dumps and heaps of slime tailings left on the ground requisitioned by the N.F.M.D. Control. A further claim is in course of preparation to be submitted later, re: machinery removed from Rampgill Mill and damage done to the Mill. There is no time limit for submitting this claim, as N.F.M.D., in Messrs. Blackburn & Main's opinion, with which Mr. Hallett and I agree, have never requisitioned the machinery. Further any claim submitted by us can only be lodged up to the time it is posted, and provision must be made for any further damage that might be done after the claim is lodged. Copies of the claim submitted for the above amount have been lodged with Messrs. Blackburn & Main, in Carlisle, with Mr. Hallett in London, and in the Co.'s files here.

Up to date, I regret to report that the Govt. departments are neither business like nor reliable. A number of departments seem to be involved, none apparently having the necessary authority to give a decision. Since the claim was lodged, the Mineral Valuer has written acknowledging receipt to Messrs. Blackburn & Main.

Conditions are difficult at present and the demands for increase of wages through labour unions more or less approved by the Government, continue to be made. It is most perplexing to know what to do. If the mine should be closed, the Government might seize the machinery. If work is carried on and a loss incurred more than the Custodian of Enemy Property considers reasonable, he may order it to be closed, and the machinery might be requisitioned. The object I have in view is to keep the mines in condition and operative until the war ends, when Head Office can make their own decisions re: the future.

Nentsbury Mine.

Development Footage: Nil

1st Sun Vein.

A. Barron & Partners.

149 Days Worked.

|             | L       | H | S.F. | S.M. | W.         | C.F. | C.F.           | C.F. | C.M.         |
|-------------|---------|---|------|------|------------|------|----------------|------|--------------|
| Forebreast. | 34 x 12 | - | 408  | -    | 37.90 x 14 | -    | 5712 less 4872 | -    | 840 - 23.78  |
| Heading     | 30 x 3  | - | 90   | -    | 8.36 x 6   | -    | 540            | -    | 540 - 15.29  |
| "           | 13 x 10 | - | 130  | -    | 12.08 x 9  | -    | 1170           | -    | 1170 - 33.13 |
| "           | 16 x 4  | - | 64   | -    | 5.94 x 8   | -    | 512            | -    | 512 - 14.50  |
| Forebreast  | 18 x 9  | - | 162  | -    | 15.05 x 10 | -    | 1620           | -    | 1620 - 45.87 |

4682 - 132.57

Tonnage to Mill: 270

Wages Paid: £101: 16:1.

Cost per Cu.M.: 15s/4d.

Rodderup Mine.

Development Footage: Nil.

West Flats.

J. Johnston & Partners.

204 Days Worked.

| Flat.    | L       | W | S.F. | S.M. | H.        | C.F. | C.M.         |
|----------|---------|---|------|------|-----------|------|--------------|
| No. 2 S. | 14 x 12 | - | 168  | -    | 15.61 x 8 | -    | 1344 - 38.05 |
| " S.W.   | 10 x 18 | - | 180  | -    | 16.72 x 6 | -    | 1080 - 30.58 |
| " N.E.   | 12 x 11 | - | 132  | -    | 12.26 x 6 | -    | 792 - 22.42  |
| " "      | 11 x 11 | - | 121  | -    | 11.24 x 6 | -    | 726 - 20.56  |
| " N.     | 12 x 9  | - | 108  | -    | 10.03 x 6 | -    | 648 - 18.34  |
| " N.E.   | 14 x 15 | - | 210  | -    | 19.51 x 6 | -    | 1260 - 35.68 |
| Pillar.  | 12 x 9  | - | 108  | -    | 10.03 x 6 | -    | 648 - 18.34  |

6418 - 183.97

Tonnage to Mill: 365

Wages Paid £142. 18. 2.

Cost per Cu.M.: 15/7.

# MINE STATISTICS.

*Coler* 1943

|           | Tons of Ore Mined.   |   |     | Cubic Metres Cut     |   |     | Tons per Cubic Metre |   |     | Days Worked.   |   |                |   | Tons per Miner's Day |   | Cubic Metres per Miner's Day |     | Per Underground Man |     | Wages paid per Miner's Day |           | Wages paid per Underground Man |           | Wages paid per Cubic Metre |       | No. of Drills Working |     | Dynamite           |      |              |  |
|-----------|----------------------|---|-----|----------------------|---|-----|----------------------|---|-----|----------------|---|----------------|---|----------------------|---|------------------------------|-----|---------------------|-----|----------------------------|-----------|--------------------------------|-----------|----------------------------|-------|-----------------------|-----|--------------------|------|--------------|--|
|           | Headings. Dev. Total |   |     | In Ore In Dead Total |   |     | In Ore In Dead Total |   |     | In Ore In Dead |   | In Ore In Dead |   | Bar- Wages gains     |   | Total                        |     | In Ore Total        |     | In Ore Total               |           | Cubic Metres Tons              |           | Headings Total             |       | Headings Total        |     | Wages paid per Ore |      | lbs. per ton |  |
|           |                      |   |     |                      |   |     |                      |   |     |                |   |                |   |                      |   |                              |     |                     |     |                            |           |                                |           |                            |       |                       |     |                    |      |              |  |
|           |                      |   |     |                      |   |     |                      |   |     |                |   |                |   |                      |   |                              |     |                     |     |                            |           |                                |           |                            |       |                       |     |                    |      |              |  |
| Nentsbury | 270                  | - | 270 | 132                  | - | 132 | 204                  | - | 204 | 149            | - | 25             | - | 174                  | - | 174                          | 181 | 0.88                | 155 | 0.70                       | 13/8      | -                              | 13/8      | 13/1                       | 17/2  | 17/2                  | 8/5 | 8                  | 495  | 1.04         |  |
| 9 Mos Av  | 273                  | - | 273 | 122                  | - | 122 | 205                  | - | 205 | 133            | - | 50             | - | 183                  | - | 183                          | 205 | 0.92                | 150 | 0.67                       | 13/11     | -                              | 13/11     | 13/2                       | 22/7  | 22/7                  | 8/8 | 8                  | 234  | 0.85         |  |
| 10 Mos Av | 273                  | - | 273 | 123                  | - | 123 | 202                  | - | 202 | 135            | - | 47             | - | 182                  | - | 182                          | 202 | 0.91                | 150 | 0.68                       | 13/10 1/2 | -                              | 13/10 1/2 | 13/2                       | 22/1  | 22/1                  | 8/8 | 8                  | 240  | 0.88         |  |
| Rodderup  | 305                  | - | 305 | 184                  | - | 184 | 200                  | - | 200 | 204            | - | 17             | - | 221                  | - | 221                          | 179 | 0.90                | 105 | 0.83                       | 14/-      | -                              | 14/-      | 14/-                       | 16/10 | 16/10                 | 8/6 | 5                  | 350  | 0.93         |  |
| 9 Mos Av  | 407                  | - | 407 | 181                  | - | 181 | 224                  | - | 224 | 173            | - | 45             | - | 218                  | - | 218                          | 235 | 1.00                | 180 | 0.83                       | 14/-      | -                              | 14/-      | 13/10                      | 16/8  | 7/4                   | 4   | 285                | 0.71 |              |  |
| 10 Mos Av | 403                  | - | 403 | 151                  | - | 151 | 222                  | - | 222 | 170            | - | 42             | - | 218                  | - | 218                          | 229 | 1.00                | 185 | 0.83                       | 14/-      | -                              | 14/-      | 13/10                      | 16/8  | 7/5                   | 4   | 295                | 0.73 |              |  |

## COMPARATIVE STATEMENT.

✱ ..... Nentsbury ..... ✱ ..... Rodderup ..... ✱

Nentsbury      Tons in Dead      Tons in Dead

Rodderup      Tons in Dead      Tons in Dead

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 88           | 24/10         | 200          | 15/1.         |
| February  | 107          | 18/10         | 177          | 14/7          |
| March     | 93           | 22/5          | 212          | 14/10         |
| April     | 134          | 18/5          | 184          | 15/5          |
| May       | 180          | 13/8          | 184          | 17/5          |
| June      | 85           | 28/5          | 143          | 21/10         |
| July      | 54           | 46/10         | 145          | 15/10         |
| August    | 148          | 14/5          | 104          | 17/5          |
| September | 150          | 12/7          | 150          | 18/5          |
| October   | 132          | 17/2          | 184          | 16/10         |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report on the Nenthead Mines November 1943

REPORT on the NENTHEAD  
MINES.

NOVEMBER 1943.

|                          | <u>Nentsbury.</u> | <u>Rampgill.</u>                  | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------------|-------------------|-----------------------------------|------------------|----------------|
| Ore Mined                | 280 Tons          | Taken over<br>by N.F.M.D.<br>Ltd. | 360 Tons         | 640 Tons       |
| Ore Milled               | Nil.              |                                   | 360 "            | 360 "          |
| Pb. Concs. prdcd.        | "                 |                                   | 38.05 "          | 38.05 "        |
| % of Galena              | "                 |                                   | 10.67%           | 10.67%         |
| Hours Worked             | "                 |                                   | 74 hours         | 74 hrs.        |
| Tons per hour            | "                 |                                   | 4.86 Tons        | 4.86 Tons      |
| Pb-Zn Ore in stock       | 1139 Tons         |                                   | Nil              | 1139 "         |
| BaCO <sub>3</sub> prdcd. | 3.05 "            |                                   | "                | 3.05 "         |

### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | 50 Tons           | 150 Tons         | Nil              | 200 "          |

Note: Particulars of quantities of Middlings given in last month's report, unchanged.

Witherite: Total Stock: 3.35 Tons

Nentsbury Mine Ore in stock: 1139 Tons.

Fluor Spar sold: Nil.

Compressed Air produced at Nenthead from Water Power approx. 600 cu.ft. per min. at 75/80 lbs pressure at face.

Compressed Air produced at Rodderup from Electrical Energy and Water Power, about 750 cu.ft. per min. at a pressure of 80/85 lbs per sq. inch at face.

Note: Messrs. Morris Ashby Ltd. have removed all the Lead Ore, previously stored for them at Rodderup after purchase, during the month. They also purchased a further 5.75 Tons of 5/15 mm. ore and removed it at the same time.

## **NENTHEAD MINES NOVEMBER 1943**

NENTSBURY MINE. During November, 280 Tons of Mixed Zinc-Lead Ore was mined and placed in stock for N.F.M.D. Ltd. The total quantity in stock at the end of the month was 1139 Tons. The conditions of the offer made by the N.F.M.D. Ltd. During the month, full details of which are in the correspondence files in the V.M. Office, are briefly: - Payment, based on 85% recovery of the Zinc Sulphide content of the ore, after they have had experience of the milling characteristics of the ore, provided future sampling of daily deliveries indicates a PbS content of over 1% Pb. to obtain payment on the Pb. content. Below 1% Pb. no payment will be made for PbS content.

The value of the Zinc content is based on £7. 0. 0. per ton of 55% Zn concentrates at Alston Station, and milling costs are to be deducted.

The material has to be delivered to Rampgill. Based on an assay value of 9.08% Zn and 1.24% Pb, with a recovery of 85%, the price of the ore delivered to Nenthead, will not meet the cost of mining and Standing Charges, and therefore unless the N.F.M.D. Ltd. can improve their offer, there will be no alternative to closing Nentsbury as a producing mine and placing it on a maintenance basis. A letter indicating that the mine may be closed unless better offers are forthcoming has been sent to the Controller.

MILL. Idle.

RODDERUP MINE. As indicated in my October report, the good ore found in the bottom of the Tyne Bottom Limestone in the Central Flats driving E. continued during November. The tonnage mined was about the same quantity but the recovery in % improved from 6.3% to 10.57%. Concentrates recovered rose from 24 Tons to 38.05 Tons. The outlook for December, if the weather permits mine and mill to work full time, should show a further increase.

Consideration is being given to providing mechanical means either to scrape the broken ore up the incline or of lowering the wagons down to the bottom of the incline and drawing them up full. The wagons would then go to the main incline and direct to the Mill. Mining the ore is not difficult, but the double handling at present tends against economical output.

MILL. In good order.

### SALES.

Lead Ore. All Concentrates, except 5.75 Tons of 5/15 mm. Ore sold to Messrs. Ashby Ltd., have been sold to Messrs. Walker Parker & Co.

Fluor Spar. None sold.

Gravel. During the month 176 Tons were sold.

GENERAL. Owing to the illness of Mr. McPhail, sole partner of Messrs. Blackburn & Main, our solicitors, consideration of the offer made without prejudice by the Mineral Valuer under date 15th November 1943 was postponed. Copies of the offer made and all correspondence relating thereto, will be found in the files. The offer the Mineral Valuer is prepared to recommend the Ministry of Supply to pay, is: - (1) The Ministry to pay all Royalties in

accordance with the Lease, providing the right to Royalty is established, and (2) An additional sum of 3d per ton on all material removed from any of the dumps included in the requisitions dated April 23rd and 30th 1942 etc.

As the letter from the Mineral Valuer involved many legal conditions, it was acknowledged by Mr. McPhail, pending the arranging of a meeting in Carlisle when Mr. McPhail was able to attend. This is provisionally for a date in December. Previous to this meeting, we are arranging a meeting in Carlisle which Mr. McPhail, Mr. Hutchinson of Messrs. Greaves and Co., our Auditors, and myself will attend, to prepare the ground.

My opinion is that 3d per ton is not sufficient, and as the Mineral Valuer has given no indication of how he arrived at this figure, whereas in our claim we showed in detail how we arrived at a value of 1.69/- per ton, we shall press him to allow a higher price. A point to be considered is that according to Income Tax law, the Company will have to pay Income Tax @ 10s/- in the £. on any sum paid by the government for the dumps, but are not liable for excess Profits Tax, until about £25,000 profit has been made either from dump revenue or trading profits. After many interviews in 1941/42 the Commissioners of Inland Revenue agreed to our; E.P.T. standard being £6886 per annum. On this, of course, Income Tax is payable, but only when we make more than £6886 in one year is E.P.T. payable.

November 1943.

Nentsbury  
\*\*\*\*\*

Mine.  
\*\*\*\*\*

Development Footage: Nil.

1st Sun Vein.

J. G. Armstrong & Partners.

149½ Days Worked.

| L       | H | S.F. | S.M. | W         | C.F. | C.M. |                       |
|---------|---|------|------|-----------|------|------|-----------------------|
| 25 x 12 | - | 300  | -    | 27.87 x 8 | -    | 2400 | - 67.96 J.G.Armstrong |
| 28 x 10 | - | 280  | -    | 26.01 x 9 | -    | 2520 | - 71.35 H. Kielty     |
| 27 x 7  | - | 189  | -    | 17.56 x 9 | -    | 1701 | - 48.16 A. Barron     |

6621   187.47   @ Days Wages.

Tonnage produced: 280

Wages Paid: £102. 5. 0.

Cost per Cu.M.: - 10s/11d.

---

Rodderup  
\*\*\*\*\*

Mine.  
\*\*\*\*\*

Development Footage: Nil

West Flats.

J. Johnston & Partners.

185½ Days Worked.

|        | L       | W | S.F. | S.M. | H.        | C.F. | C.M.         |
|--------|---------|---|------|------|-----------|------|--------------|
| Dip.   | 34 x 15 | - | 510  | -    | 47.38 x 5 | -    | 2550 - 72.20 |
| Flat.  | 34 x 6  | - | 204  | -    | 18.95 x 8 | -    | 1632 - 46.21 |
| "      | 12 x 11 | - | 132  | -    | 12.26 x 6 | -    | 792 - 22.42  |
| Pillar | 12 x 9  | - | 108  | -    | 10.03 x 6 | -    | 648 - 18.35  |

5622   159.18

Tons to Mill:- 360

Wages Paid: £129. 11. 2.

Cost per Cu.M.: - 16s/3

# MINE STATISTICS

November 1943

|           | Tons of Ore Mined. |      |       | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked. |          |       |        | Tons per Miner's Day |       |        | Cubic Metres per Miner's Day |       |        | Per Underground Man |       |        | Wages paid per Miner's Day |       |        |          | Wages paid per Underground Man |        |          | Wages paid per Cubic Metre |          |       | No. of Drills Working |         | Dynamite |          |
|-----------|--------------------|------|-------|------------------|----------|-------|----------------------|----------|-------|--------------|----------|-------|--------|----------------------|-------|--------|------------------------------|-------|--------|---------------------|-------|--------|----------------------------|-------|--------|----------|--------------------------------|--------|----------|----------------------------|----------|-------|-----------------------|---------|----------|----------|
|           | Headings.          | Dev. | Total | In Ore           |          | Total | In Ore               |          | Total | In Ore       |          | Total | In Ore |                      | Total | In Ore |                              | Total | In Ore |                     | Total | In Ore |                            | Total | In Ore |          | Total                          | In Ore |          | Total                      | Headings | Total | lbs.                  | per ton |          |          |
|           |                    |      |       | In Ore           | In Deads |       | In Ore               | In Deads |       | In Ore       | In Deads |       | In Ore | In Deads             |       | In Ore | In Deads                     |       | In Ore | In Deads            |       | In Ore | In Deads                   |       | In Ore | In Deads |                                | In Ore | In Deads |                            |          |       |                       |         | In Ore   | In Deads |
| Nentsbury | 280                | -    | 280   | 150              | -        | 150   | 150                  | -        | 150   | 23           | -        | 23    | 173    | -                    | 173   | 180    | 180                          | 180   | 125    | 125                 | 125   | 105    | 105                        | 105   | 135    | 135      | 135                            | 131    | 131      | 131                        | 81       | 81    | 81                    | 125     |          |          |
| 10 Mos Av | 273                | -    | 273   | 222              | -        | 222   | 222                  | -        | 222   | 47           | -        | 47    | 182    | -                    | 182   | 202    | 202                          | 202   | 091    | 091                 | 091   | 005    | 005                        | 005   | 131    | 131      | 131                            | 221    | 221      | 221                        | 88       | 88    | 88                    | 088     |          |          |
| 11 Mos Av | 274                | -    | 274   | 212              | -        | 212   | 212                  | -        | 212   | 45           | -        | 45    | 181    | -                    | 181   | 201    | 201                          | 201   | 094    | 094                 | 094   | 071    | 071                        | 071   | 131    | 131      | 131                            | 212    | 212      | 212                        | 87       | 87    | 87                    | 091     |          |          |
| Rodderup  | 300                | -    | 300   | 220              | -        | 220   | 220                  | -        | 220   | 20           | -        | 20    | 211    | -                    | 211   | 195    | 195                          | 195   | 080    | 080                 | 080   | 075    | 075                        | 075   | 141    | 141      | 141                            | 187    | 187      | 187                        | 85       | 85    | 85                    | 104     |          |          |
| 10 Mos Av | 403                | -    | 403   | 222              | -        | 222   | 222                  | -        | 222   | 42           | -        | 42    | 218    | -                    | 218   | 229    | 229                          | 229   | 100    | 100                 | 100   | 085    | 085                        | 085   | 141    | 141      | 141                            | 168    | 168      | 168                        | 75       | 75    | 75                    | 075     |          |          |
| 11 Mos Av | 397                | -    | 397   | 222              | -        | 222   | 222                  | -        | 222   | 41           | -        | 41    | 218    | -                    | 218   | 224    | 224                          | 224   | 100    | 100                 | 100   | 082    | 082                        | 082   | 141    | 141      | 141                            | 1610   | 1610     | 1610                       | 75       | 75    | 75                    | 076     |          |          |

## COMPARATIVE STATEMENT.

Nentsbury ..... Rodderup .....

Tons in Deads ....

Nentsbury

Tons in Deads ....

Rodderup

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|              |  |
|--------------|--|
| ... Mos. Av. |  |
| ... Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 85           | 24/10         | 206          | 15/1          |
| February  | 107          | 13/10         | 177          | 14/7          |
| March     | 43           | 29/8          | 212          | 14/6          |
| April     | 134          | 15/5          | 184          | 15/5          |
| May       | 150          | 15/5          | 184          | 17/5          |
| June      | 85           | 28/5          | 143          | 21/10         |
| July      | 54           | 40/10         | 195          | 15/10         |
| August    | 144          | 14/5          | 169          | 17/5          |
| September | 155          | 12/7          | 150          | 18/5          |
| October   | 132          | 17/2          | 184          | 16/10         |
| November  | 187          | 12/11         | 159          | 18/7          |
| December  |              |               |              |               |

## Report on the Nenthead Mines December 1943

### REPORT            on    the    NENTHEAD MINES.

DECEMBER      1943.

|                           | <u>Nentsbury.</u> | <u>Rampgill.</u>   | <u>Rodderup.</u> | <u>Totals.</u> |
|---------------------------|-------------------|--------------------|------------------|----------------|
| Ore Mined                 | 103 Tons          | Taken over         | 470 Tons         | 573 Tons       |
| <del>Exm</del> Ore Milled | Nil.              | by N.F.M.D<br>Ltd. | 470 "            | 470 "          |
| Pb. Concs. Prdcd.         | "                 |                    | 60.80 "          | 60.80 "        |
| % of Galena               | "                 |                    | 12.93%           | 12.93%         |
| Hours Worked              | "                 |                    | 94 hrs.          | 94 hrs.        |
| Tons per hour             | "                 |                    | 5 Tons           | 5 Tons         |
| Pb-Zn Ore in stock        | 1242 Tons         |                    | Nil              | 1242 "         |
| BaCO <sub>3</sub> Prdcd.  | 1.9 "             |                    | "                | 1.9 "          |

#### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | Nil.              | Nil.             | Nil              | Nil.           |

The Blende-Witherite Ore in stock was all sold and delivered to N.F.M.D.Ltd. during December, together with other small parcels of Blende Concentrates which had been lying for many years on Nentsbury and Rodderup heaps. The total wet weight delivered to Rampgill for N.F.M.D.Ltd. was 281 Tons from Nentsbury and 237.5 Tons from Rodderup. Neither ~~the~~ the % of moisture nor the analyses have been agreed yet.

|                                                                  |                        |
|------------------------------------------------------------------|------------------------|
| <u>Witherite</u> in stock,                                       | 5.25 Tons              |
| <u>Nentsbury Mine Ore</u> , in stock                             | 1242 Tons              |
| (Delivery of this to N.F.M.D.Ltd. will commence in January 1944) |                        |
| <u>Fluor Spar</u>                                                | NONE produced or sold. |

COMPRESSED AIR produced at Nenthead, up to Dec. 18th when Nentsbury Mine was closed, approx. 600 cu.ft. per minute at about 75 lbs pressure at face.

COMPRESSED AIR produced at Rodderup, from Electrical Energy and Water Power, about 750 cu.ft. per min. at a pressure of 80/85 lbs per sq. in. at the face.



## **NENTHEAD MINES DECEMBER 1943**

**NENTSBURY MINE.** During December, 103 Tons only was produced from Nentsbury and added to the heap outside. The estimated quantity of ore in stock at the end of Dec. was 12142 tons. N.F.M.D. Ltd have agreed to accept delivery of this ore at their new mill at Rampgill, commencing in January 1944. We wrote the Controller, Sir Wm. Larke, asking him to state definitely whether he could make a better offer for the Zinc-Lead Ore mined from Nentsbury and put in stock at the request of N.F.M.D. Ltd., of which Co., Sir Wm. is a Director. We pointed out that the value of this ore based on his offer, would not meet the cost of mining. Mr. Rose, his assistant, replied on Sir Wm.'s behalf stating that they could not modify their terms. I therefore informed Sir Wm. and the Labour Exchange that we had no alternative but to close the mine and place it on maintenance only. This I did, and the miners and mill-men were paid off on Dec. 18th. The mine is now inspected periodically and the level and workings and machinery in the mine and mill maintained in fair condition.

**RODDERUP MINE.** The good ore found in the bottom of the Tyne Bottom Limestone in the Central Flats continued during the month. The tonnage mined was 470 Tons or 110 Tons more than was mined in Nov., the percentage recovery increased from 10.57% to 12.93%. The output was 60.8 Tons compared with 24 Tons in October, when the percentage recovery was 8.33%, and with 38.05 Tons in Nov. It will be remembered that the good ore mined in 1940/41 in the Western Section of the Central Flats was all found in the top 6' of the Tynebottom Limestone, whereas the good ore now mined is found in the bottom 6' of the Limestone. How far this ore extends E. & N. it is impossible to state. The small number of miners we are allowed to employ is not sufficient to carry out any separate development without decreasing the output and incurring a heavy loss. Approaches to the Government to increase the standard price of Lead have not met with success. Apparently the Government can obtain what Lead is required for munitions of war, from overseas and, by reducing home consumption, the Lead position is not causing any anxiety. Reference was made in my Nov. report, about adopting some mechanical means for extracting the ore more cheaply. We have put a small incline down to the bottom of the limestone, which has helped matters somewhat, but it now seems that the best method will be either to drive a new incline from where we are working up to the Horse Level, East of where the main winch is situated, or to try a mechanical elevator to lift the ore to the Horse Level. These two means of lifting the ore are having attention, and during January we shall decide which to adopt.

**MILL.** In good order.

### **SALES.**

**Lead Ore.** Sold to Messrs. Walkers Parker & Co., Newcastle.

**Fluor Spar.** None sold.

**Gravel & Stones.** 625.5 Tons sold during the month, at the usual prices of 1/4½ per ton on Site for Stones, and 4s/- to 4/6 per ton on site for Gravel.



## GENERAL.

During December, all the heaps of Zinc-Blende Middlings lying at Nentsbury and Rodderup for many years, and some other small heaps found at both places, were delivered to N.F.M.D. Ltd., at Rampgill. The book tonnage was estimated about 1931 to amount to 200 Tons. This tonnage, with the additional heaps, amounted to 518.5 Tons, wet weight. Samples of the heaps were taken and assayed for us by Messrs. Michie & Davidson. Samples taken by N.F.M.D. Ltd. were taken at the same time. Our results are completed, and they have promised their results by January 13th. N.F.M.D. Ltd. are commencing to treat the Nentsbury Mine Ore in January.

Owing to an influenza epidemic, it was not possible to arrange a meeting with Mr. MacPhail, and the Government Mineral Valuers in Carlisle before Dec. 21st when Mr. MacPhail, his confidential clerk, and I met Messrs. Corfield, Alexander and Rooke, at Messrs. Blackburn & Mains' Office. Messrs. Corfield and Alexander are Government Valuers, and Mr. Rooke is the District Valuer. Much discussion took place during the meeting which lasted about 3½ hours, and of which reports will be found in the Co.'s files at Nenthead, at Messrs. Blackburn & Main's offices, and with Mr. Hallett in London. Briefly the results of the meeting were that the Valuers indicated that they were inclined to suggest to the Ministry of Supply that the price per ton to be paid for the dumps treated by N.F.M.D. Ltd. should be raised from 3d to 7d. per ton, and mention was made by the Valuers that, assuming all the tonnages in the dumps were treated, the figure realised would be £17,500. Mr. MacPhail suggested that Mr. Corfield, senior Mineral Valuer, from Leeds, should submit in writing an offer for the dumps at so much per ton. Further correspondence between both parties will be carried on, and further meetings will take place. It seems likely the Government will not agree to the amount I claimed for compensation, but the Government's offer may, and I think, will, be increased further.

|                                               |         |   |      |                        |           |      |              |
|-----------------------------------------------|---------|---|------|------------------------|-----------|------|--------------|
| <u>NENTSBUURY MINE</u> - December 1943.       |         |   |      |                        |           |      |              |
| <u>Development Footage:</u> Nil.              |         |   |      |                        |           |      |              |
| No ground broken - work ceased Dec.18th 1943. |         |   |      |                        |           |      |              |
| <hr/>                                         |         |   |      |                        |           |      |              |
| <u>R o d d e r u p   M i n e .</u>            |         |   |      |                        |           |      |              |
| <u>Development Footage:</u> Nil.              |         |   |      |                        |           |      |              |
| <u>W e s t   F l a t s .</u>                  |         |   |      |                        |           |      |              |
| <u>Jos. Johnston &amp; Partners.</u>          |         |   |      | 184 Days Worked.       |           |      |              |
|                                               | L       | W | S.F. | S.M.                   | H         | C.F. | C.M.         |
| Dip Right                                     | 48 x 15 | - | 720  | -                      | 66.89 x 3 | -    | 2160 - 61.16 |
| " Right                                       | 34 x 15 | - | 510  | -                      | 47.88 x 2 | -    | 1020 - 28.88 |
| " Left                                        | 38 x 16 | - | 608  | -                      | 56.48 x 4 | -    | 2432 - 68.86 |
| Breast.                                       | 10 x 8  | - | 80   | -                      | 7.43 x 8  | -    | 640 - 18.12  |
| 6252 - 177.02 @ Days Wages.                   |         |   |      |                        |           |      |              |
| Tonnage to Mill:- 470                         |         |   |      |                        |           |      |              |
| Wages Paid: £140. 15. 10.                     |         |   |      | Cost per Cu.M.:- 16/6. |           |      |              |

# MINE STATISTICS

19

|  | Tons of Ore Mined. |  |       |  | Cubic Metres Cut |  |         |  | Tons per Cubic Metre |  |        |  | Days Worked. |  |       |  |            |  | Tons per Miner's Day |  |        |  | Cubic Metres per Miner's Day |  |       |  | Per Underground Man |  |         |  | Wages paid per Miner's Day |  |          |  | Wages paid per Underground Man |  |      |  | Wages paid per Cubic Metre |  |          |  | No. of Drills Working |  | Dynamite |  |         |  |        |  |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--------------------|--|-------|--|------------------|--|---------|--|----------------------|--|--------|--|--------------|--|-------|--|------------|--|----------------------|--|--------|--|------------------------------|--|-------|--|---------------------|--|---------|--|----------------------------|--|----------|--|--------------------------------|--|------|--|----------------------------|--|----------|--|-----------------------|--|----------|--|---------|--|--------|--|-----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  | Headings.          |  | Total |  | In Ore           |  | In Dead |  | Total                |  | In Ore |  | In Dead      |  | Total |  | Bar. Wages |  | Total                |  | In Ore |  | In Dead                      |  | Total |  | In Ore              |  | In Dead |  | Total                      |  | Headings |  | Total                          |  | Dev. |  | Total                      |  | Headings |  | Total                 |  | lbs.     |  | per ton |  |        |  |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                    |  |       |  |                  |  |         |  |                      |  |        |  |              |  |       |  |            |  |                      |  |        |  |                              |  |       |  |                     |  |         |  |                            |  |          |  |                                |  |      |  |                            |  |          |  |                       |  |          |  |         |  | Miners |  | Labourers |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                    |  |       |  |                  |  |         |  |                      |  |        |  |              |  |       |  |            |  |                      |  |        |  |                              |  |       |  |                     |  |         |  |                            |  |          |  |                                |  |      |  |                            |  |          |  |                       |  |          |  |         |  |        |  |           |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Note: No ground cut in December 1913.

## COMPARATIVE STATEMENT.

\* Nentsbury ..... \* Rodderup ..... \*

Nentsbury ..... Tons in Dead .....  
Rodderup ..... Tons in Dead .....

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 88           | 24/10         | 206          | 15/1          |
| February  | 107          | 13/10         | 177          | 14/7          |
| March     | 45           | 20/8          | 212          | 14/10         |
| April     | 134          | 18/5          | 184          | 15/5          |
| May       | 180          | 16/3          | 184          | 17/5          |
| June      | 85           | 28/8          | 143          | 21/10         |
| July      | 54           | 46/10         | 195          | 15/10         |
| August    | 118          | 14/5          | 164          | 17/5          |
| September | 158          | 12/7          | 156          | 18/5          |
| October   | 132          | 17/2          | 184          | 16/10         |
| November  | 187          | 12/1          | 159          | 18/7          |
| December  | -            | -             | 177          | 18/1          |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

| ... Mos. Av. | ... Mos. Av. |
|--------------|--------------|
|              |              |

Note: These costs are affected by an all round increase in wages of 1/- per shift, plus various of increase from Nov. 22nd 1913, the date when the mine became operative.

## ANNUAL REPORT ON THE NENTHEAD MINES 1943

### NENTSBURY MINE.

During 1943, the total tonnage mined in Nentsbury with the small labour force employed, amounted to 3117 Tons.

The Lead Ore tonnage mined and crushed amounted to 1745 Tons, the balance, 1372 Tons, being Mixed Ore containing Blende, Galena and Witherite. The Mixed Ore was mined at the request of Non-Ferrous Minerals Development Ltd., a subsidiary of the Ministry of supply. N.F.M.D. Ltd. erected a new grinding and Flotation Plant in the Rampgill Mill Building during 1942 and 1943, and commenced to crush the dumps in July 1943. For this purpose, the Rampgill Mill Building was requisitioned for the Ministry of supply in July 1942, and later, in March and April, 1943, the tailings dumps, Rampgill, Hillersden, and Smallcleugh, were requisitioned, together with slime dumps at Rampgill, Wellgill, and Brownley Hill, and the site of the old washing floor at Brownley Hill, for a Tailings deposit dam.

From the 1745 Tons of Lead Ore mined and washed at Nentsbury Mill, 80.05 Tons of Lead Ore Concentrates were produced the percentage recovery being 4.613% compared with 5.728% in 1942. Mining of Lead Ore was stopped at the end of June 1943, as it was obvious that the small quantity of ore broken and the low recovery, incurred a heavy loss. It was then that N.F.M.D. Ltd. arranged to buy Zinc ore if we would undertake to mine it. They stated they would purchase such ore on agreed assay results of samples taken by representatives of both Companies. From July 19th to Dec. 18th., Zinc Ore was broken and stocked outside Nentsbury Mine. The total quantity broken was 1372 Tons. To make a test, 120 tons was crushed and washed in the Nentsbury Mill, but the result was very unsatisfactory. Lead concentrates recovered amounted to only 0.25 Tons, Zinc Middlings recovered, to 55 Tons. A sample of the ore as broken assayed 9.08% Zn and 1.24 Pb. Samples of the two parcels of Zinc Middlings produced assayed 18.9% Zn and 7.43% Zn, with only traces of Pb. No more milling tests were made, and the ore was put into stock for N.F.M.D. Ltd.

A verbal arrangement was made with N.F.M.D. Ltd. to sample and test parcels of 500 Tons of the Mixed Ore in the new Flotation Mill at Rampgill, and from October onwards requests

Were made for this company to take the ore, with no effect.

In late November, it was definitely pointed out to N.F.M.D. Ltd.

that a written decision must be come to, otherwise Nentsbury Mine would be closed. This brought a reply and we were informed that the N.F.M.D. would pay us only for the Zina Sulphide content of the ore, on the basis of 85% recovery of ZnS and 80% recovery of Lead Sulphide content, if over 1%Pb, If under 1% Pb, no payment for lead would be made. From this the cost of treatment was to be deducted and this was estimated at from 8s/- to 10s/- per ton of crude ore. The offer was so unsatisfactory, that we were forced to consider closing Nentsbury Mine. A further letter to Sir William Larke, the Controller of Non-Ferrous

Minerals Development, asking whether he could improve his offer, brought a reply from his Assistant, \*Mr. W. C. C. Rose, that they could not improve their offer. We therefore decided to close Nentsbury Mine and Mill, and this we did, on Dec. 18th 1943. The mine and mill were placed on a maintenance and inspection basis, and except for two miners retained to look after the Company's property, all others were paid off, after the necessary arrangements had been made with the Ministry of Labour & National Service.

After much correspondence arrangements were made with the Ministry of Supply for the N.F.M.D. Ltd. to purchase the stocks of Zinc-Lead Middlings at Nentsbury and Rodderup, and the bulk of the middlings were delivered in December, to the Rampgill Mill. All stocks at Nentsbury and Rodderup, and recorded in my Monthly Reports, have been cleared and, in addition, other heaps lying about for many years, and not considered to be of sufficient value to be included in the stocks, have also been sold. The tonnage in the stock sheets was 200 Tons, and the actual tonnage delivered and sold was 483.55 Tons (dry weight). The revenue from these, after meeting costs of transport etc., should be about £1000. Final figures have not been submitted by N.F.M.D. Ltd. Yet.

Before a decision was made to close Nentsbury Mine, every possible consideration was given re: (a) the loss, (b) the probable loss to the Co. if the lease was surrendered after one year and/or the Government decided to requisition the property and dismantle it, paying little or nothing for the plant and machinery, and (c) the overall loss to the Company if work was stopped, and the mine placed on a maintenance basis, only.

In 1938, it was considered that by closing Nentsbury the loss to the Company, would amount to £2442 per annum. That sum included Standing Charges. The point we had to consider was:

Could we continue to work Nentsbury without a comparatively heavy loss, and also what were the prospects of mining richer ore, in face of the low offer made by the Government for the ore and the high cost of breaking it. It was considered the best course was to close the mine. The loss in operating Nentsbury Mine for 1943, not including any Standing Charges, is approximately £1540. If Standing charges had been included the loss would have amounted to over £2442, and, in addition, the ore which has a mineral value, and might pay to mine under normal conditions, was being used for no return. Taking everything into consideration it was considered economical to close the mine temporarily and leave what ore there is in the mine intact. Compared with Rodderup, the output of Lead Ore at Nentsbury 80.05 Tons for 6 months (equals 160.10 Tons per annum) and Rodderup, 448.2 Tons, the recovery value at Nentsbury was 4.613% and Rodderup, 9.235%. Moreover the outlook at Rodderup for Nov. and Dec., was most encouraging, whereas the outlook at Nentsbury was discouraging. In writing thus, I consider Nentsbury Mine worth proving by bore-holes in depth especially on each of the N. & S., and the E. & W. Veins around Wellhope Shaft. In normal times with reasonable supply of skilled labour at a fair wage, and a unit of Flotation plant attached to Nentsbury Mill, Nentsbury is likely to prove an economical and profitable venture on a moderate scale.

### Ore Reserves.

The ore reserves at the ends of 1942, were given as 2962 Tons of Lead Ore, and 76,222 Tons of Zinc- Witherite-Lead Ore. deducting 1745 Tons of Lead Ore, mined in 1943, the Lead Ore Reserves are 1217 Tons, the grade of which is about 5%. The quantity of Mixed Ore Is 76,222 less 1372 Tons mined in 1943, equals 74850 Tons. This ore is payable at present prices of Lead, Zinc and Witherite, if a reasonable recovery of all three minerals could be made. The N.F.M.D. Mill Is unable to recover any Witherite and up to the end of Dec. 1943, the new Mill could recover only a very small percentage of the Pb. content, and the percentage of Lead in the Concentrates did not average 70% Pb. Details of tonnages treated and recovery to Dec. 31<sup>st</sup> 1943, are as follows : -

|                                             | 19 <sup>th</sup> July<br>-31 <sup>st</sup> Aug | Sept.  | Oct.   | Nov.   | Dec.   |
|---------------------------------------------|------------------------------------------------|--------|--------|--------|--------|
| Est. Dry Tons Milled                        | 27,219                                         | 23,882 | 25,163 | 23,855 | 22,103 |
| Dry Tons of Zn. Concs.<br>Produced (Approx) | 779                                            | 754    | 851    | 808    | 889.5  |
| Approx. Assay of Concs.<br>% Zn.            | 54                                             | 56.7   | 56     | 55.75  | 54.8   |

The above subject to revision

|                                                     |                 |             |
|-----------------------------------------------------|-----------------|-------------|
| Lead Concentrates, dispatched 7 <sup>th</sup> Sept. | 22.03 dry ton,  | of 64.8% Pb |
| “ 2 <sup>nd</sup> Oct.                              | 49.34 dry ton,  | of 56.6% Pb |
| “ 17 <sup>th</sup> Dec.                             | 25.913 dry ton, | of 78.7% Pb |

|                                      |                                     |           |
|--------------------------------------|-------------------------------------|-----------|
| Lead Concentrates in stock, at Mill, | 20.00 dry ton,                      | of 75% Pb |
| “ “ “ “                              | also about 300-400 Tons             | (Approx)  |
|                                      | assaying about 52.8% to be upgraded |           |

Dec. tonnage included 407 Tons of Jig Middlings from V.M.C.

### RODDERUP MINE

During the first nine months of 1943, the ore mined in Rodderup Fell was below the average grade mined in 1942.

To carry out a development programme of diamond drilling which we were asked to do by the Non-Ferrous Minerals Development Control of the Ministry of Supply in late 1942 and up to June 1943, mining was interrupted to some extent and work up to the middle of 1943 was confined to removing pillars and extracting all the good ore possible from the western area of the Central Flats, where, in 1940 and 1941, the ore mined yielded between 10% and 11%. The labour force allowed us was insufficient and not highly skilled, and as a result, the long transport of the ore entailed more labourers, and therefore less ore was broken.

The Royal Canadian Engineers, doing the diamond-drilling, were recalled during the first week of June. The results of their drilling proved interesting, but not enough drilling was done to prove conclusively whether or not a large body of payable ore existed between the Flats under the Incline and the East End Shaft. Boreholes put out 200 ft. in an Easterly direction from the flats under the

Incline, and a borehole put out from a X-cut mid-way between the East End Shaft, bored West towards the Flats, showed indifferent results. Full details of the results of the boreholes will be found in the files in the office. The reports of the boreholes were made by Dr. K. C. Dunham of the Geological Survey. It has been proved since, by mining, in the Flats under the Incline, and driving East, that the boreholes set out as near as possible in about the middle of the Tynebottom Limestone, were drilled above the good ore since found by mining to exist, not in the top of the Limestone, as was the case in 1940 and 1941, when mining West, but in the bottom of the Limestone, and that as far as we have driven the good ore exists down to the grey bed below the Tynebottom Limestone. It has always been our opinion that the good ore existed in the bottom and by setting out the bore-holes about 8 to 10 ft. from the bottom of the Limestone and allowing them to dip E. it was expected we would cut through the Limestone. It seems evident that the strata dips E. to a greater degree than we anticipated and is probably thrown by faults. To what extent, we were unable to judge from the small amount of footage drilled. By mining in the bottom, below the level, which was worked W. of the Incline, we discovered good ore which raised the percentage from 6.3% in October to 12.93% in December. The tonnage broken was also raised from 365 Tons in October to 470 tons in December, and the output rose from 24 Tons in October to 60.80 Tons in December.

The year's results are: -Tons mined, 4853 Tons of ore. Concentrates produced, 448.20 Tons. Percentage recovered, 9.235%. These results compare with those of 1942, as follows: -

Tons mined, 5380. Concentrates produced, 479.65 Tons Percentage recovery in 1942 was 8.915%. The lower tonnage mined in 1943 was accounted for by the long transport from the West End, necessitating employing a large percentage of our small labour staff for this, and not being, able, until after June, to open up the Flats under the incline, which were much nearer to the Horse Level. The increased tonnage which resulted from this is shown by comparing the October and December results.

The outlook for 1944 is encouraging, but owing to an insufficient supply of skilled miners it has not been possible to do any development and consequently in the area before us going E., I cannot give any idea of the quantity of good ore available. This much, it is possible to state: That should the good ore now being mined continue during the year, the output from Rodderup should meet most, and possibly all, the cost incurred in maintaining the Nenthead branch. Should the grade drop there will be a loss, but any loss incurred is not likely to equal the loss which would result if the mine was closed or if taken-over by the Government without adequate payment for the Company's plant and machinery.

#### Ore Reserves

The ore reserves last year were taken at 84892 Tons.

The quantity mined in 1943 was 4853 Tons. As no real development was done, the tonnage broken, 4853 Tons, is deducted from last year's reserve, leaving 80039 Tons. The reserve tonnage in Rodderup was calculated in 1937, to be the calculated tonnage in a rectangular block extending from near the West End X-course to a point near the East End, and in width from several places where

mineral was exposed and regarded as then payable, less 50% of the total cubic tonnage, allowed for poor blocks and pillars. I consider it my duty to point out that when this tonnage was calculated, the cost of mining was less by approx. 50% than it is now. Although I am confident that there will be found in Rodderup Mine, in the N. and S. sides of the Vein, more tonnage of ore than is given, the value of a ton of ore in 1943 compared with a ton of ore in 1937, must be taken into consideration. Therefore it is not possible to state within reasonable limits, what the ore reserves amount to based on present costs and values. Since 1937, no work has been done in the Flats S. of the Vein owing to scarcity of labour. That the Flats exist there was proved many years ago, and it is very probable that blocks of good ore, equal to what has been mined N. of the Vein, exist. All these factors must be considered.

### SALES OF PRODUCTS.

#### Lead Ore.

Lead Ore Concentrates produced, were sold to Messrs. British Pyros White Lead Co., Ltd., West Drayton, Middlesex, Messrs. Morris Ashby Ltd., London, and Messrs. Walkers Parker & Co. Ltd., Newcastle. Messrs. Pyros Ltd. purchased 1/3 and 3/5 mm. sizes, and up to the time they were compelled to close their works, they took 228.411 Tons during the year, for which they paid. Messrs. Ashby Ltd., purchased 5/15 mm. size Ore, packed in kegs and delivered Liverpool for shipment. Owing to British and Indian Government restrictions of export and import licences, and the shipping position generally, this firm only purchased 40.50 Tons during 1943, for which they paid promptly. Messrs. Walkers Parker purchased the balance of our production. The prices obtained from Messrs. Pyros Ltd. and Messrs. Ashby Ltd., realised a nett price of over £4 per ton more than was obtained by selling to Messrs. Walkers Parker for smelting. The loss of markets through Government actions, represented a loss of about £700 to the V.M. Co. per annum.

#### Fluor Spar.

56.85 Tons of Fluor Spar were sold. Without washing, which we were unable to do, our grade was too poor to sell economically.

#### Witherite

10.80 Tons were sold to Messrs. Athole G. Allen (Stockton) Ltd., Stockton-on-Tees, realising about £4 per ton nett.

#### Blende-Witherite.

483.55 Tons dry weight, were sold to N.F.M.D. Ltd. The final price, based on assay results, is not known yet, but should realise about £1000 after meeting expenses.

#### Stones & Chippings.

3242.35 Tons were sold during the year. Price of Stones, 1s/6d per ton on site, less 1½d per ton commission. Chipping 4s/- to 4s/6d per ton on site.

### GENERAL.

The year 1943 has been a most difficult one. For the early part of the year, the ore in Rodderup was below payable grade, as was also the case in Nentsbury. In addition, two increases of 1s/- per day each for all workpeople were demanded and had to be paid. The present cost of wages is now 63% above the rate ruling in 1939. There were increases also, in the cost of most of the materials used. The prices of Lead and Zinc as fixed in December 1939,

remained the same. Labour difficulties became more frequent and labour, on the whole, became less efficient.

It was pointed out to both Mr. Hallett and myself, by the Custodian of Enemy Property, when a licence was granted us to carry on the Co.'s business within the United Kingdom, that a Company controlled by persona in enemy, or enemy-occupied, country, is an enemy technically within the meaning of the Trading with the Enemy Act 1939, and as respects a business carried on in enemy territory or enemy occupied territory, anybody of persons carrying on that business are, for the purpose of the Act, deemed to be enemies. We are also forbidden to have any communications with any member of the Company in enemy occupied territory. These restrictions have at times taxed us to the limit, when fighting in the Company's Interest.

Especially has this been the case when dealing with Government Departments, who both possess power, and probably, at times, assume more power than they possess. In my last Annual report, I stated that a claim had been lodged with the District Valuer for £350 per annum rent for Rampgill Mill Building. Many interviews have taken place during the year, with Mr. MacPhail, of Messrs. Blackburn & Main, Solicitors, Carlisle, present, but to the end of the year no settlement had been reached.

For the three dumps, Rampgill, Hillersden, and Smallcleugh, together with the Zinc Slime Dumps at Brownley Hill, Wellgill and Rampgill, which were requisitioned in March and April 1943, by the Ministry of Supply for N.F.M.D. Ltd., a company formed by the Ministry of Supply -, a claim worked out technically by myself and framed by Messrs. Blackburn & Main, and decided upon at a meeting in Carlisle, with Mr. Hallett present, for compensation amounting £49,609. 10. 1. was lodged on October 23rd 1943. A reply to this claim was sent to Messrs. Blackburn & Main in November, from the Mineral Valuer in Leeds, with a suggested offer which he was prepared to recommend for acceptance by the Government, without prejudice. I did not consider this offer reasonable, and after consulting Mr. Hallett and Mr. MacPhail, the latter replied informing the Mineral Valuer we could not accept his offer. A further meeting was then arranged at Carlisle, and both the mineral Valuer, his Assistant, and the District Valuer, met Mr. MacPhail and myself in Mr. MacPhail's office on Dec. 21<sup>st</sup> 1943. After about 3½ hours' consultation and debate, the Mineral Valuer thought they could recommend the Government to pay a price per ton for the heaps which was more than double what was previously suggested. They promised to send us notes they took at the meeting, and this they did later. Further meetings at Carlisle, Haltwhistle and Alston took place, and between Mr. MacPhail and myself, and a reply to the Mineral Valuer's notes was sent. No reply has yet been received.

A further claim will be lodged, once this claim has been settled, for damage to the Company's building at Rampgill, and the machinery dismantled there. This claim will be a difficult one to make, as before the end of the war, it will be impossible to foretell what damage N.F.M.D. Ltd., may do to the Company's property. So far, we have sold for scrap, and for further use, Iron and Steel removed by N.F.M.D. Ltd. from Rampgill Building, and from the Heap End Shed



which was getting into bad repair, to the value of £1671. 17. 6., of which £250 was placed to the mining account. To keep this account separate from the mining account, the sum of £1671. 17. 6. was placed in Martins Bank Ltd., Alston, as No.2 a/c. It is most likely the auditor will credit this (No.2) a/c with the £250. in the Mining a/c.

A statement of the tonnage of dump material treated and concentrates produced, is given on page 3 of this report.

To the end of the year, it will be seen, 122,222 Tons were milled, equal to approx. 75% of the rated capacity of the Mill.

It will be noticed that the percentage recovery of Zinc is low, and the saleable percentage of Lead Concentrates still lower. Most of the dump ore treated was taken from the Hillersden dump. This heap was sampled by boring by the Non-Ferrous Ores Committee (which was later superseded by the Non-Ferrous Ores Development Control) in August 1940, and, in a report prepared by Dr. K. C. Dunham and myself, the Assayers results gave 0.47% Pb and 3.91% Zn, as compared with our sampling the surface and sides by pits in 1939, when our average was 0.50% Pb and 5.10% Zn. Based on the lower analyses, the percentage recovered is extremely low for a modern plant, which, incidentally, seldom works 24 hours without some breakdown. The Lead Concentrates cannot be sold without secondary treatment and even then, will not be of high grade.

It is the opinion of Messrs. Greaves & Co. who audit our accounts, that any sums received from N.F.M.D. Ltd., for dump material must be put to profit and loss a/c., and cannot be regarded as "return of capital" under the conditions of the present Income Tax Laws. The reason for this is that the cost of depositing the dumps was allowed as working cost at the time they were laid down, and was not regarded as capital expenditure. Therefore, any sums paid will be liable to Income Tax, and if paid for in a lump sum, some portion will be liable for Excess Profits Tax. We hope we get paid yearly at per ton of dump ore treated. In my opinion the Government will not agree to buy the dumps outright and pay for them before they have treated them.

For the use of water from Perry Dam, at a maximum quantity of 500 galls. per minute, N.F.M.D. Ltd., have agreed to pay the V.M. Co. £375 per annum, which sum will meet the Certain Rent due to Lord Allendale (now £150) and Greenwich Hospital (also reduced to £150 now). Greenwich Hospital has also promised to make a grant of £500 for 1943 from the first Royalty paid by N.F.M.D. Ltd., from the treatment of dumps.

This was after I had met the Director of G.H. in September, and taken him into Rodderup Mine and raised the question of grants.

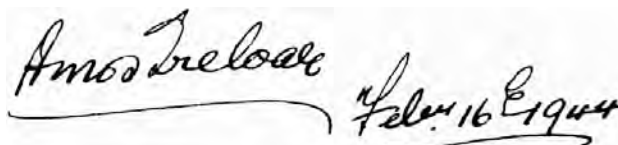
The question of Royalty from the dumps is not yet settled. It seems that no Royalty should be paid the G.H. for minerals extracted from the dumps material which existed in 1896 when the V.M. Co. bought the mining and milling rights and plant then existing from the Nenthead and Tynedale Lead Co.

It does, however, seem that royalty will be demanded for such portion of the dumps as have been deposited since 1896, and from figures supplied by Mr. Dunham, obtained from the mining reports at Allenheads, G.H. Estates office,

and data in the possession of the Geological Survey, London, it appears that Lord Allendale is entitled to about 1/38th of the Lead Royalty and 1/4 of the Zinc Royalty. The G.H. Estates are entitled to the remainder, although this matter is not settled. It seems obvious to our Solicitors, and I agree with them and with the Landlords, that N.F.M.D. Ltd is liable to pay the royalty according to the terms of the V.M. Co.'s leases. Full particulars and a complete record of all the correspondence, and reports of meetings dealing with all matters appertaining to Government Departments, officials of subsidiary Government companies and others concerned will be found in the Company's files at Nenthead, in Messrs. Blackburn & Main's offices at Carlisle, and with Mr. Hallett at the London office. References in this report to these matters, must be regarded as a synopsis of what has happened during the year. It is not possible to give in this report details of all matters dealt with during the year.

In conclusion, I wish to record my warm appreciation of the help I have received from Mr. B. T. Hallett, Mr. MacPhail of Messrs. Blackburn & Main, and all members of the Staff. Their loyal support is beyond praise. I have also to state, that, with the exception of one young member of the staff, no special bonus has been paid and no increase of salary granted. This should be regarded as a mark of loyalty from the staff to the Company.

As previously recorded, the workmen, including the mine and mill foremen have received increased wages amounting to approximately 65% above the 1939 rate of wage. Income Tax and the high cost of living has placed the income of the senior staff almost on a level with the workmen. I can without hesitation affirm that the utmost possible has been, and will be, done in the Company's interest under extremely difficult conditions.

A handwritten signature in cursive script, reading "Amos Ireland", followed by the date "Feb 16 1944". The signature is written in dark ink on a light background.

#### Appendix.

I have to report that Mr. Westgarth Forster Brown, senior partner of Messrs. Forster, Brown & Rees, agents for the Greenwich Hospital Estates until the end of 1942, died during 1943. The Mineral Agents for Greenwich Hospital Estates are now: Messrs. William Armstrong & Sons, whose present address is: Heddon Hall, Heddon-on-the-Wall, Newcastle-on-Tyne.

## Report on the Nenthead Mines January 1944

### REPORT ON THE NENTHEAD MINES.

JANUARY 1944.

|                          | <u>Nentsbury.</u>                          | <u>Rampgill.</u>          | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------------|--------------------------------------------|---------------------------|------------------|----------------|
| Ore Milled               | Nil.                                       | Taken over<br>by NFMD.Ltd | 435 Tons         | 435 Tons       |
| Ore Milled               | "                                          |                           | 435 "            | 435 "          |
| Pb. Cones. prdcd.        | "                                          |                           | 48.55 "          | 48.55 "        |
| % of recovery            | "                                          |                           | 11.16%           | 11.16%         |
| Hours worked             | "                                          |                           | 88 hrs.          | 88 hrs.        |
| Tons per hour            | "                                          |                           | 4.94 Tons        | 4.94 Tons.     |
| Pb-Zn Ore in stock       | 646.8 Tons (595.2 Tons<br>dd. N.F.M.D.Ltd) |                           | -                | 646.80 Tons    |
| BaCO <sub>3</sub> prdcd. | Nil.                                       |                           | -                | -              |

#### STOCKS.

|                     | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|---------------------|-------------------|------------------|------------------|----------------|
| Crude Ore           | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende-Witherite    | Nil.              | Nil.             | Nil.             | Nil.           |
| Witherite in Stock: |                   |                  | XXX. 5.25 Tons   |                |
| Nentsbury Mine Ore: |                   |                  | 646.80 "         |                |
| Fluor Spar:         |                   |                  | Nil.             |                |

Compressed Air produced at Nenthead: Nil.

Compressed Air produced at Rodderup: from Electrical Energy and Water Power, 750 cu.ft. per min. at a pressure of 80/85 lbs. per sq. in. at the face.

## **NENTHEAD MINES JANUARY 1944**

NENTSBURY MINE. As and from Dec. 18th 1943, Nentsbury Mine was put on an inspection basis and only maintenance work carried out.

MILL. On the same basis as the mine.

RODDERUP MINE. The ore mined in the Central Flats in January, amounted to 435 Tons v. 470 Tons in Dec. Concentrates produced amounted to 48.55 Tons v. 60.80 Tons in Dec. The percentage recovery was 11.16% v 12.93% in Dec., a drop in value of 1.77% I am inclined to think the February output will show an improvement on that of January. The ore varies from month to month, and towards the end of January the ore in one place was richer.

I regard the outlook at Rodderup, at the end of January, as encouraging and had we double the number of employees we could certainly make a profit.

Re: the reference in my Dec. report to either driving a new incline from the working places in the Flats to the Horse Level, to connect with the Level East of where the winch now stands, or adopting some mechanical means to raise the ore either be a shaft or inclined belt; we have decided to drive the incline.

We regard this method as most economical. Before commencing from the Flats to drive this incline, we shall have to take out some rich ore which exists for many feet West of the point where the incline will be started. In consequence, it may mean that the incline will not be started until about mid-March.

MILL. In good order.

### SALES.

Lead Ore: Sold to Messrs. Walkers Parker & Co., Ltd., Newcastle -on- Tyne.

Fluor Spar. None sold.

Gravel & Stones. 107.8 Tons sold at the usual prices.

GENERAL. During January, 595.20 Tons of Nentsbury Mine Ore were delivered to N.F.M.D. Ltd. Assay values are not yet to hand. The 595.2 Tons was the wet weight, as was also the 1242 Tons shown in stock. Deductions of about 4% for moisture are likely. A settlement has been reached with the N.F.M.D. Ltd. re: the middlings delivered in December from Rodderup and Nentsbury. The amount received on January 31st was £1100 on a/c. A sum of about £20 has been kept in hand by the N.F.M.D. until the actual milling cost per ton for December is known. We also received Water Rent on the basis of £375 per annum, for the period July 19th-Dec. 31st 1943. No. decision has yet been reached with the Government re: payment for the dumps ore treated. The amount crushed to end of 1943 mostly from Hillersdon Heap, given by N.F.M.D. is 122,222 Tons from which 4081.50 Tons of 55% Zn. Concentrates were produced and 300/500 Tons Pb. Concentrates assaying from 52.8% to 78.7% Pb were also produced although some of the Pb. concentrates have to be retreated.

January 1944.

Rodderup Mine.  
@@@@@@@@@@@@@@@@ @@@@@@

Development Footage: Nil.

West Flats  
(East Dip.)

Jos. Johnston & Partners.

196 Days Worked.

|           | L  | W    | S.F.  | S.M.    | H.  | C.F.   | C.M.    |
|-----------|----|------|-------|---------|-----|--------|---------|
| Dip R.    | 18 | x 15 | - 270 | - 25.08 | x 5 | - 1350 | - 38.32 |
| " L.      | 20 | x 16 | - 320 | - 29.73 | x 5 | - 1600 | - 45.30 |
| Breast S. | 17 | x 11 | - 187 | - 17.37 | x 8 | - 1496 | - 42.36 |
| " N.      | 11 | x 11 | - 121 | - 11.24 | x 9 | - 1089 | - 30.83 |
| Incline   | 12 | x 6  | - 72  | - 6.69  | x 8 | - 576  | - 16.31 |

6111 - 173.02 @ Days Wages

Wages Paid: £146: 18: 10.

Cost per Cu.M.: - 17s/-

# MINE STATISTICS

January 1944

|  | Tons of Ore Mined. |      |       | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked. |          |           |      |              |          | Tons per Miner's Day |       |          | Cubic Metres per Miner's Day |          |       | Per Underground Man |         |  | Wages paid per Miner's Day |  |  | Wages paid per Underground Man |  |  | Wages paid per Cubic Metre |  | No. of Drills Working | Dynamite |  |          |  |      |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--------------------|------|-------|------------------|----------|-------|----------------------|----------|-------|--------------|----------|-----------|------|--------------|----------|----------------------|-------|----------|------------------------------|----------|-------|---------------------|---------|--|----------------------------|--|--|--------------------------------|--|--|----------------------------|--|-----------------------|----------|--|----------|--|------|-------|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |                    |      |       |                  |          |       |                      |          |       | Miners       |          | Labourers |      | In Ore       |          |                      |       |          |                              |          |       |                     |         |  |                            |  |  |                                |  |  |                            |  |                       |          |  | In Deads |  | Bar- | Wages | gains |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Headings.          | Dev. | Total | In Ore           | In Deads | Total | In Ore               | In Deads | Total | In Ore       | In Deads | Total     | Tons | Cubic Metres | Headings | Dev.                 | Total | Headings | Total                        | Headings | Total | lbs.                | per ton |  |                            |  |  |                                |  |  |                            |  |                       |          |  |          |  |      |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                    |      |       |                  |          |       |                      |          |       |              |          |           |      |              |          |                      |       |          |                              |          |       |                     |         |  |                            |  |  |                                |  |  |                            |  |                       |          |  |          |  |      |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## COMPARATIVE STATEMENT.

Nentsbury      Rodderup      Nentsbury      Rodderup

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 173          | 19/5          |              |               |
| February  |              |               |              |               |
| March     |              |               |              |               |
| April     |              |               |              |               |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings and Devs. for your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

## Report on the Nenthead Mines February 1944

### REPORT ON THE NENTHEAD MINES.

FEBRUARY 1944.

|                       | <u>Nentsbury.</u> | <u>Rampgill.</u>          | <u>Rodderup.</u> | <u>Totals.</u> |
|-----------------------|-------------------|---------------------------|------------------|----------------|
| Ore Mined             | Nil.              | Taken over<br>by N.F.M.D. | 470 Tons         | 470 Tons       |
| Ore Milled            | Nil.              |                           | 470 "            | 470 "          |
| Pb. Concs. prdcd "    |                   |                           | 60.90 "          | 60.90 "        |
| % of recovery         | "                 |                           | 12.95%           | 12.95%         |
| Hours worked          | "                 |                           | 96 hrs.          | 96 hrs.        |
| Tons per hour         | "                 |                           | 4.89 Tons        | 4.89 Tons      |
| Pb-Zn Ore in<br>stock | 122.2 Tons        | (524.6 d/d<br>N.F.M.D.)   | -                | 122.20 Tons    |
| BaCO <sub>3</sub>     | Nil               |                           | -                | -              |

#### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|----------------|
| Crude Ore        | Nil               | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende Witherite | Nil               | Nil.             | Nil.             | Nil.           |

Witherite in stock 5.25 Tons  
Nentsbury Mine Ore in stock, 122.20 Tons  
Fluor Spar in stock: None.

Compressed Air produced at Nenthead: None.

Compressed Air produced at Rodderup: At Rodderup about 750 cu.ft. per min. at a pressure of 80/85 lbs. per sq. inch at the face.

## NENTHEAD MINES FEBRUARY 1944

NENTSBURY MINE & MILL. Both Mine and Mill have been on a maintenance basis only. Both have been inspected periodically and kept in fair conditions. I have had a request from Messrs. Harrison owners of Hartside Barytes Mines, to lease Nentsbury Mill to crush Barytes. Nothing has been settled but as it is unlikely that the V.M. Co. will use Nentsbury again until after hostilities cease, I consider it is sound business to let the Mill if Messrs. Harrison undertake to pay all costs of maintenance insure the building and Engine and pay a reasonable rent for the mill. This matter may be settled next month.

RODDERUP MINE. During Febry. 470 Tons of ore were mined and crushed for a recovery of 60.9 Tons of Concentrates, that is 12.95%. This compares with 435 Tons in January, 48.55 Tons of Concentrates, and 11.16% recovery value. The ore in the Central Flats is maintaining its value in the bottom of the Tyne Bottom Limestone. Labour scarcity is the most difficult problem to deal with. Labour is not available and will not be for the duration of the war. I estimate that an output of 65 to 70 Tons of Concentrates per month, of about 81% Pb. will pay our total costs when including sales of gravel, stones etc. If the labour force could be increased by say 50%, Rodderup would yield a fair profit. As it is, the percentage of Standing Charges is high.

MILL. In good order.

### SALES.

Lead Ore. Sold to Messrs. Walkers Parker & Co., Ltd. Newcastle-on-Tyne.

Fluor Spar. None sold or broken.

Gravel & Stones. 335.8 Tons of Stones & Gravel were sold at the usual prices.

GENERAL. During the month, 524.6 Tons of Nentsbury Mine Ore were delivered to the N.F.M.D. Ltd., which, with 595.2 Tons delivered in January, makes a total of 1119.8 Tons.

Early in March, this parcel will have been delivered and cleaned up.

During January, N.F.M.D. reported, subject to revision, that 25800 Tons of Hillersdon Dump material was treated for a recovery of 1022.60 Tons of Concentrates which assayed 54.2% Zn, and 115 Tons of Lead Concentrates which assayed around 71.3% Pb.

February figures are not yet to hand.

Mr. MacPhail and I have met several times in January and February, to consider replies to various Government officials but so far, no definite settlement has been reached and no fixed basis worked out. The Government has so many departments and so many officials that progress is almost impossible.



RODDERUP FELL MINE.

Development Footage: Nil.

West Flats - East Dip.

Jos. Johnston & Partners. 215 Days Worked.

|         | L  | W    | S.F.  | S.M.    | H   | C.F.   | C.M.           |
|---------|----|------|-------|---------|-----|--------|----------------|
| Flat N. | 21 | x 8  | - 168 | - 15.61 | x 9 | - 1512 | - 42.81        |
| " "     | 15 | x 8  | - 135 | - 12.54 | x 9 | - 1215 | - 34.40        |
| " S.    | 32 | x 12 | - 384 | - 35.67 | x 8 | - 3072 | - 86.98        |
| " "     | 17 | x 12 | - 204 | - 18.95 | x 7 | - 1428 | - 40.43        |
| Incline | 20 | x 8  | - 160 | - 14.86 | x 5 | - 800  | - 22.65 (Sole) |
| "       | 14 | x 4  | - 56  | - 5.20  | x 8 | - 448  | - 12.68 (Side) |

8475 - 239.95

. Tonnage to Mill: 470 Tons

Wages Paid: £163. 2. 10.

Cost per Cu.M.: - 13/7



## Report on the Nenthead Mines March 1944

REPORT on the NENTHEAD

M I N E S.  
@@@@@@@@@@

M A R C H 1 9 4 4.  
 0000000000 0000000000

|                    | <u>Nentsbury.</u>     | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------|-----------------------|------------------|------------------|----------------|
| Ore Mined          | Nil.                  | Taken<br>over by | 565 Tons         | 565 Tons.      |
| Ore Milled         | Nil.                  | N.F.M.D.         | 565 "            | 565 "          |
| Pb. Cones. prdcd.  | Nil.                  |                  | 67.05 "          | 67.05 "        |
| % of Recovery      | Nil.                  |                  | 11.87 %          | 11.87 %        |
| Hours Worked       | Nil.                  |                  | 119 hrs          | 119 hrs        |
| Tons per hour      | Nil.                  |                  | 4.75 Tons        | 4.75 Tons      |
| Pb-Zn Ore in stock | Nil                   |                  | Nil.             | Nil.           |
|                    | All sold to N.F.M.D.) |                  |                  |                |
| Witherite in stock | 5.25 Tons             |                  | Nil.             | 5.25 Tons.     |

STOCKS.

|                | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|----------------|-------------------|------------------|------------------|----------------|
| Crude Ore      | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| Band-Witherite | Nil.              | Nil.             | Nil.             | Nil.           |

Wetherite in stock: 5.25 Tons  
Nentsbury Mine Ore " " : Nil (All sold to N.F.M.D.)

Galena in stock (at Rodderup Fell): 58.378 Tons

Fluor Spar, produced:- Nil, Sold:- Nil.

Compressed Air produced at Nenthead, Nil.

" " " Rodderup, by Electrical Energy and Water Power  
about 750 cu.ft. per min. @ 80lbs  
to 85 lbs. pressure.

## **NENTHEAD MINES**

### **MARCH 1944**

NENTSBURY. Mine & Mill. Bot on maintenance basis only. Messrs. Harrisons', referred to in my last report, have had a trial run of Barytes Ore through Nentsbury Mill, with satisfactory results. So far, no agreement has been reached with this firm, but Mr. N. Harrison said an agreement would be made later, and that his firm would pay all costs and a reasonable rent. The firm of Harrison is an old established one and regarded as satisfactory.

RODDERUP MINE. During March, 565 Tons of ore was mined and crushed. Concentrates recovered amounted to 67.05 Tons and the percentage recovered was 11.87%. This was an exceptionally good month. Fortunately, the ore was good and there was a good attendance of the small number of miners employed. I cannot guarantee that this will be maintained as we have no reserves of ore blocked out. The new incline is being driven, but progress is slow owing to lack of staff.

MILL. Maintained in good order. I have to report that Joseph Stephenson, Mill Foreman for many years and an old employee of the V.M. Co. for very many years, has informed me that he will retire at the end of April. He is in his 70th year.

Joseph Stephenson has been a faithful and loyal employee and has discharged his duties faithfully, serving the Coy. well. I have informed him we will pay him up to the end of June, although he really deserved more, but I felt it was all I could promise him at present.

#### SALES.

Gravel. 426.70 Tons of Stones & Gravel were sold at previous prices.

Lead Ore. Sold to Walkers, Parker & Co., Newcastle.

Fluor Spar. None produced or sold.

GENERAL. The balance of Nentsbury Mine Ore has been delivered to the N.F.M.D., Rampgill. The original wet weight was given as 1242 Tons. The wet weight delivered was 1239.235 Tons, and the dry weight to be paid for by N.F.M.D. Ltd. is 1194.56 Tons.

During February, N.F.M.D. Ltd. reported 21,930 Tons of material treated at Rampgill, from which they recovered 831.44 Tons of Concentrates of 54.76% Zn., and 65 Tons of Concentrates of 77% Pb.

Again, during March, Mr. MacPhail, senior partner of Messrs. Blackburn & Main, and I have met and considered correspondence from the Mineral Valuer, re: the proposed settlement for the requisitioned dumps. I regret we seem to have made little progress.

RODDERUP FELL MINE.

Development Footage: Nil.

West Flats - East Dip.

Jos. Johnston & Partners.

235 Days Worked.

|                | L. | W.   | S.F.  | S.M.    | H.   | C.F.   | C.M.     |
|----------------|----|------|-------|---------|------|--------|----------|
| Flat S.E.      | 26 | x 14 | - 364 | - 33.82 | x 8  | - 2912 | - 82.45  |
| " N.W.         | 21 | x 9  | - 189 | - 17.56 | x 8  | - 1512 | - 42.81  |
| Incline Bottom | 42 | x 18 | - 756 | - 70.23 | x 5  | - 3780 | - 107.03 |
| " Side.        | 18 | x 6  | - 108 | - 10.03 | x 12 | - 1296 | - 36.70  |

9500 - 268.99 @ Days Wages.

Tonnage to Mill:- 565 Tons

Wages Paid: £178: 5: 7.

Cost per Cu.M.:- 13s/3d.

---

| MINE STATISTICS..... |  |  |                  |  |  |                      |  |  |              |  |  |           |  |  |                      |  |  |                              |  |  |                     |  |  | 1944                       |  |  |                                |  |  |                            |  |  |                       |  |                           |  |          |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |
|----------------------|--|--|------------------|--|--|----------------------|--|--|--------------|--|--|-----------|--|--|----------------------|--|--|------------------------------|--|--|---------------------|--|--|----------------------------|--|--|--------------------------------|--|--|----------------------------|--|--|-----------------------|--|---------------------------|--|----------|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|---------|--|--|--------|--|--|
| March                |  |  |                  |  |  |                      |  |  |              |  |  |           |  |  |                      |  |  |                              |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |                           |  |          |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |
| Tons of Ore Mined.   |  |  | Cubic Metres Cut |  |  | Tons per Cubic Metre |  |  | Days Worked. |  |  |           |  |  | Tons per Miner's Day |  |  | Cubic Metres per Miner's Day |  |  | Per Underground Man |  |  | Wages paid per Miner's Day |  |  | Wages paid per Underground Man |  |  | Wages paid per Cubic Metre |  |  | No. of Drills Working |  | Wages paid per ton of Ore |  | Dynamite |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |         |  |  |        |  |  |
|                      |  |  |                  |  |  |                      |  |  | Miners       |  |  | Labourers |  |  |                      |  |  |                              |  |  |                     |  |  |                            |  |  |                                |  |  |                            |  |  |                       |  |                           |  |          |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  | In Dead |  |  | In Ore |  |  |

# COMPARATIVE STATEMENT.

Nentsbury ..... Rodderup .....

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 173          | 19/3          |              |               |
| February  | 240          | 15/1          |              |               |
| March     | 264          | 14/5          |              |               |
| April     |              |               |              |               |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings as stated in your letter of 3rd June, 1932.

| Nentsbury    |  |
|--------------|--|
| ... Mos. Av. |  |
| ... Mos. Av. |  |

## Report on the Nenthead Mines April 1944

### REPORT on the NENTHEAD MINES.

APRIL 1944.

|                         | <u>Nentsbury.</u> | <u>Ramsgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------------|-------------------|------------------|------------------|----------------|
| Ore Mined               | Nil.              | Taken over       | 400 Tons         | 400 Tons       |
|                         |                   | by N.F.M.D.      |                  |                |
| Ore Milled              | "                 |                  | 400 "            | 400 "          |
| Pb. Cons. prdcd.        | "                 |                  | 44.50 "          | 44.50 "        |
| % of Recovery           | "                 |                  | 11.12%           | 11.12%         |
| Hours Worked            | "                 |                  | 86 hrs           | 86 hrs         |
| Tons per hour           | "                 |                  | 4.65 Tons        | 4.65 Tons.     |
| Pb-Zn Ore in stock      | "                 |                  | -                | -              |
| Witherite " " 5.25 Tons |                   |                  | -                | 5.25 "         |

---

#### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | Nil.              | Nil.             | Nil.             | Nil.           |

Galena in stock at Rodderup: 48.09 Tons

Witherite " " " Nentsbury: 5.25 "

Fluor Spar produced or sold: Nil.

---

Compressed Air produced at Nenthead: Nil.

" " " " Rodderup; by Electrical Energy and Water  
Power, about 750 cu.ft. per min.  
at a pressure of 80/85 lbs per  
sq. in.

## **NENTHEAD MINES**

### **APRIL 1944**

NENTSBURY. Mine & Mill. Inspected periodically and main level in repair by Harry Peart, late mine foreman and now foreman at Rodderup Mine. No agreement has yet been made with Messrs. Harrison re: letting Nentsbury Mill. The delay, from what I have been told, is caused by shortage of labour and an existing agreement, due to terminate later this year, with the Silver Band Barytes Mines, where the Hartside Barytes Co. have undertaken to supply crude ore. Negotiations are still proceeding with regard to the agreement.

RODDERUP FELL MINE. Illness of miners, especially Rock Drill miners, has resulted in less ore being broken. The ore is also of lower grade and is likely to be lower until the new incline is completed and we are able to work in the bottom of the Tynebottom Limestone where the ore is richer. The outlook for a few weeks is a probable lower value of ore and less concentrates produced. During April 400 Tons of ore were mined and crushed and 44.50 Tons of Concentrates produced. March was a rather exceptional month. Every effort is being made to keep costs down and to increase efficiency, and when the new incline is finished two labourers will be released and a direct road from the Flat to the horse level will result in less time spent in handling the ore.

MILL. In good order. Mr. Joseph Stephenson, Mill foreman, left the Coy's employ at the end of April. He is succeeded by Mr. J. H. Millican, who has been Mine Foreman in Rodderup since 1935, and who had previously spent some years in the Mill. Mr. Millican's health has not been good for some time, and frequent changes of temperature have affected him. Mr. H. Peart, for many years foreman at Nentsbury Mine, has, with Mr. G. Robinson, been appointed mine foremen in Rodderup.

#### SALES.

Gravel. 159.45 Tons sold. We expect an increase in May.

Lead Ore. With the exception of a small parcel sold to Messrs. Morris Ashby, the bulk ore was sold to Messrs. Walkers Parker & Co., Newcastle.

Fluor Spar. None produced or sold.

GENERAL. I have had meetings with Mr. MacPhail re: correspondence with the Mineral Valuer. As yet no decision has been reached with regard to compensation.

For March and April, N.F.M.D. Ltd., treating Hillersdon dumps and a small quantity of Smallcleugh dumps, report the following figures: - March, 25,873 Tons treated, 851.11 Tons of 52.9% Zn Concs. and 2 Tons daily of 78% Pb Concs., produced; April, 21,934 Tons treated, 700.8 Tons of 52.77% Zn. Concs. and 82.1 Tons of 78.6% Pb Concs. (including 10 Tons produced by retreating lower grade ore previously produced), produced. Demands for payments of Royalty and Mine Ore sold have been made to N.F.M.D., and after much trouble and submitting referee samples for Lead content in the Mine Ore, the results of which confirmed our analyst's results, a value has at last been reached and agreed to by N.F.M.D. who have the referees' fees to pay.



RODDERUP MINE.Development Footage: NIL.APRIL 1944.

|                                     |         | <u>West</u> |          | <u>Flats</u> |             | <u>East Dip.</u>        |             |
|-------------------------------------|---------|-------------|----------|--------------|-------------|-------------------------|-------------|
| <u>Jos. Johnson &amp; Partners.</u> |         |             |          |              |             | <u>193 Days Worked.</u> |             |
|                                     |         | <u>L</u>    | <u>W</u> | <u>S.F.</u>  | <u>S.M.</u> | <u>H.</u>               | <u>C.F.</u> |
| Flat N.E.                           | 9 x 12  | -           | 108      | -            | 10.03       | x 7                     | - 756 -     |
| " N.W.                              | 7 x 8   | -           | 56       | -            | 5.20        | x 8                     | - 448 -     |
| " S.E.                              | 27 x 14 | -           | 378      | -            | 35.12       | x 7                     | - 2646 -    |
| " N.                                | 15 x 10 | -           | 150      | -            | 13.93       | x 9                     | - 1350 -    |
| Incline                             | 5 x 6   | -           | 30       | -            | 2.79        | x 7                     | - 210 -     |
| Side                                | 11 x 7  | -           | 77       | -            | 7.15        | x 7                     | - 539 -     |
| Crosscut                            | 6 x 5   | -           | 30       | -            | 2.79        | x 7                     | - 210 -     |

6159 - 174.39 @ Days' Wages.  
Tonnage to Mill:- 400 Tons

Wages Paid: £147. 8. 3.

Cost per Cu.M.:- 16s/11d.

# MINE STATISTICS

April 1944

|             | Tons of Ore Mined. |      |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |       | Days Worked. |         |       |           |         |       | Tons per Miner's Day |       | Cubic Metres per Miner's Day |       | Per Underground Man |              |          | Wages paid per Miner's Day |       | Wages paid per Underground Man |       | Wages paid per Cubic Metre |       | No. of Drills Working |         | Dynamite      |       |       |
|-------------|--------------------|------|-------|------------------|---------|-------|----------------------|---------|-------|--------------|---------|-------|-----------|---------|-------|----------------------|-------|------------------------------|-------|---------------------|--------------|----------|----------------------------|-------|--------------------------------|-------|----------------------------|-------|-----------------------|---------|---------------|-------|-------|
|             | Headings.          | Dev. | Total | In Ore           | In Dead | Total | In Ore               | In Dead | Total | Miners       |         |       | Labourers |         |       | In Ore               | Total | In Ore                       | Total | Tons                | Cubic Metres | Headings | Dev.                       | Total | Headings                       | Total | Headings                   | Total | lbs.                  | per ton |               |       |       |
|             |                    |      |       |                  |         |       |                      |         |       | In Ore       | In Dead | Total | In Ore    | In Dead | Total |                      |       |                              |       |                     |              |          |                            |       |                                |       |                            |       |                       |         | Bar-<br>Wages | gains | Total |
|             |                    |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                      |       |                              |       |                     |              |          |                            |       |                                |       |                            |       |                       |         |               |       |       |
| Nentsbury   |                    |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                      |       |                              |       |                     |              |          |                            |       |                                |       |                            |       |                       |         |               |       |       |
| ...Mos. Av. |                    |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                      |       |                              |       |                     |              |          |                            |       |                                |       |                            |       |                       |         |               |       |       |
| ...Mos. Av. |                    |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                      |       |                              |       |                     |              |          |                            |       |                                |       |                            |       |                       |         |               |       |       |
| Rodderup    | 4200               | -    | 4200  | 174              | -       | 174   | 230                  | -       | 230   | 195          | -       | 195   | 207       | 207     | 090   | 090                  | 180   | 081                          | 15/3  | -                   | 15/3         | 15/3     | 15/3                       | 15/3  | 15/3                           | 15/3  | 15/3                       | 15/3  | 4                     | 306     | 070           |       |       |
| ...Mos. Av. | 490                | -    | 490   | 227              | -       | 227   | 210                  | -       | 210   | 210          | -       | 210   | 220       | 220     | 105   | 105                  | 204   | 094                          | 15/1  | -                   | 15/1         | 15/1     | 15/1                       | 15/1  | 15/1                           | 15/1  | 15/1                       | 15/1  | 5                     | 343     | 070           |       |       |
| ...Mos. Av. | 408                | -    | 408   | 214              | -       | 214   | 218                  | -       | 218   | 210          | -       | 210   | 222       | 222     | 101   | 101                  | 200   | 091                          | 15/2  | -                   | 15/2         | 15/2     | 15/2                       | 15/2  | 15/2                           | 15/2  | 15/2                       | 15/2  | 5                     | 334     | 071           |       |       |

## COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱ Rodderup .....✱

Nentsbury      Tons in Deaths      Rodderup      Tons in Deaths

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 173          | 14/3          |              |               |
| February  | 240          | 15/1          |              |               |
| March     | 269          | 14/3          |              |               |
| April     | 174          | 13/10         |              |               |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report on the Nenthead Mines May 1940

REPORT      on the      NENTHEAD      MINES  
 000000      00 000      00000000000000      00000000

MAY, 1944.  
 00000      00000000

|                    | <u>Nentsbury.</u> | <u>Rampgill.</u>         | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------|-------------------|--------------------------|------------------|----------------|
| Ore Mined          | Nil.              | Taken over<br>by N.F.M.D | 345 Tons         | 345 Tons.      |
| Ore Milled         | "                 |                          | 345 "            | 345 "          |
| Pb. Concs prdcd.   | "                 |                          | 26.70 "          | 26.70 "        |
| % of Recovery      | "                 |                          | 7.74%            | 7.74%          |
| Hours Worked       | "                 |                          | 70 hrs.          | 70 hrs.        |
| Tons per hour      | "                 |                          | 4.93 Tons        | 4.93 Tons      |
| Witherite in stock | 5.25 Tons         |                          | -                | 5.25 "         |

### STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|----------------|
| Crude Ore        | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| Blende-Witherite | Nil.              | Nil.             | Nil. .           | Nil.           |

Galena in stock, at Rodderup, 30.382 Tons

Witherite in stock, at Nentsbury, 5.250 Tons

Fluor Spar, produced and sold, Nil.

Compressed Air, produced at Nenthead, Nil.

Compressed Air, produced at Rodderup, by electrical energy and water power, about 750 cu.ft. per min. at a pressure of 80 lbs. per sq. inch at face.

## NENTHEAD MINES MAY 1944

NENTSBURY. Mine & MILL, inspected periodically and maintained in good repair. The mine throughout cannot be kept in perfect order by two men, one day per week, but all main levels are kept in repair. There will be some small falls in some of the upper levels which will have to be cleaned before operations can be resumed, but all falls of any size and likely to extend are repaired. The mill is in good working condition.

RODDERUP FELL MINE. During the month two days were lost for the Whitsun holiday, as decreed by the Government. In my last report, I expressed the opinion that the ore might be lower in grade for some weeks until the new Incline is completed and all mining kept down to the bottom of the Tynebottom Limestone and on to the Whetstone bed. It seems that the richest ore is in the bottom 6 ft. of the Limestone. During May one of our four rock drill miners was unable to work underground and in addition to this a heavy section of roof over the main travelling road had to be heavily timbered. Important as mining, ore was, we had to employ at least three and sometimes four miners for more than two weeks to lift heavy timber into position to support the roof. Once the new incline is finished, the main travelling road will be down the Incline.

MILL. Maintained in good order.

### SALES.

Gravel & Stones, sold amounted to 616.10 Tons at the usual prices.

Lead Ore. During the month 44.408 Tons (dry) was sold to Walkers Parker & Co., Newcastle-on-Tyne.

GENERAL. Meetings and correspondence with Mr. MacPhail and N.F.M.D. have not yet resulted in any settlement re: compensation, neither has this Coy. paid us for the ore sold to them from Nentsbury early this year, although terms of settlement have been agreed. Statements have been sent both to the superintendent at Nenthead and to the Secretary in London. The figures supplied to us for the Month of May by N.F.M.D., stated as "provisional" are 22409 Tons of dump material treated, Zinc Concs. recovered, 660.79 Tons with an approx. assay value of 55.4% Zn, Lead Concentrates produced about 68 dry tons averaging approximately 76.3% Pb. If the figure of 9s/- per ton, given to us in writing as the cost of treatment provisionally, is correct, and the value of 54/55% Zn Concentrates also given to us in writing as £7. 0. 0. per ton is right, with the value of 76.3% Pb. Concentrates at about £12. 10. 0 per ton, then the costs for May would total £10,084 (22409 x 9s/-) against a total revenue of £5475.53 (£4625.53 for Zinc concentrates and £850 for Lead concentrates). The loss therefore seems to be about £4608.47. The bulk of Hillersden heap has been treated and comparatively small quantities of Rampgill heap taken away from both ends. At present, they are treating Smallcleugh dumps, from which they took a small quantity last year before confining themselves to treating Hillersden heap. I have no recent knowledge of the cost of treatment of the heaps and all figures supplied to us so far have been marked as provisional. Even after 6 months, when we were given the provisional cost of treatment as

9s/~ per ton, and were promised we would be supplied with the actual cost of treatment for Dec. 1943, we have not yet been given this actual cost. In the Balance Sheet for 1943, prepared by Messrs. Greaves & Co., of Newcastle, a provisional sum of 6d per ton was included, on Messrs. Greaves advice, as money owing to the V.M. Co. by N.F.M.D. The Mineral Valuer first suggested 3d per ton as compensation for the dump materials treated, and later 7d Per ton, while also mentioning a lump sum of £17,500 for the whole of the heaps. Messrs. Greaves definitely state that the V.M. Co. cannot regard the heaps as a Capital charge, because when made, working costs were allowed for Income Tax and therefore any money received must be included in the Balance Sheet and become liable for Income Tax. As 1943 was the last year in which the Coy. could derive any benefit for the allowance on the heavy loss sustained in 1938, Messrs. Greaves considered it was just and reasonable to include a reasonable value per ton of dump material treated by N.F.M.D. up to Dec. 31st 1943, and consequently the 122,222 Tons given us as treated in 1943 was valued at 6d per ton, equals £3055. 11. 0. The Balance Sheet therefore showed a profit of £1588. 15. 7. But for that the loss for 1943 would have been £1469. 15. 5.

It is most difficult and perplexing problem to know what do under existing circumstances. If Rodderup were closed, the loss per annum after paying maintenance charges, rents, rates, and supervision would amount to more than £1500. Further the Government would, in all probability irrespective of what loss they might incur, take over the property and plant, and use it similarly to Rampgill. The best policy therefore that I can pursue, entirely in the Co.'s interest is to carry on, until the end of hostilities if at all possible.

| <u>Rodderup Fell Mine - May 1944.</u> |         |       |         |      |                           |         |               |              |  |
|---------------------------------------|---------|-------|---------|------|---------------------------|---------|---------------|--------------|--|
| <u>Development Footage: Nil.</u>      |         |       |         |      |                           |         |               |              |  |
| <u>West Central Flats - East Dip.</u> |         |       |         |      |                           |         |               |              |  |
| <u>J. Johnson &amp; Partners.</u>     |         |       |         |      | 150 Days Worked.          |         |               |              |  |
|                                       | L.      | W.    | S.F.    | S.M. | H.                        | C.F.    | C.M.          |              |  |
| Flat N.W.                             | 9 x 12  | - 108 | - 10.03 | x 8  | - 864                     | - 24.46 | )             |              |  |
| " W.                                  | 7 x 9   | - 63  | - 5.85  | x 8  | - 504                     | - 14.27 | (             | J. Johnson.  |  |
| " Pillars                             | 8 x 8   | - 64  | - 5.95  | x 8  | - 512                     | - 14.50 | )             |              |  |
| " N.E.                                | 15 x 13 | - 195 | - 18.11 | x 8  | - 1560                    | - 44.17 | )             | G. Armstrong |  |
| " E.                                  | 21 x 13 | - 273 | - 25.36 | x 8  | - 2184                    | - 61.84 | )             | T. Jackson   |  |
| " N.                                  | 12 x 8  | - 96  | - 8.92  | x 8  | - 768                     | - 21.74 | )             |              |  |
| Incline.                              | 9 x 6   | - 54  | - 5.02  | x 6  | - 324                     | - 9.17  | )             | H. Peart     |  |
|                                       |         |       |         |      |                           |         | 6716 - 190.15 | @ Days Wages |  |
| Tonnage to Mill:- 345 Tons            |         |       |         |      |                           |         |               |              |  |
| Wages Paid: £113: 2: 6.               |         |       |         |      | Cost per Cu.M.:- 11s/11d. |         |               |              |  |

# MINE STATISTICS

May 1944

|  | Tons of Ore Mined. |            | Cubic Metres Cut |          | Tons per Cubic Metre |        |          | Days Worked. |        |           |       |        |          | Tons per Miner's Day |          | Cubic Metres per Miner's Day |      | Per Underground Man |  | Wages paid per Ore |  |  |  | Dynamite |  |          |  |              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--------------------|------------|------------------|----------|----------------------|--------|----------|--------------|--------|-----------|-------|--------|----------|----------------------|----------|------------------------------|------|---------------------|--|--------------------|--|--|--|----------|--|----------|--|--------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  |                    |            |                  |          |                      |        |          | Miners       |        | Labourers |       | In Ore |          |                      |          |                              |      |                     |  |                    |  |  |  |          |  | In Deads |  | Wages gained |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Headings.          | Dev. Total | In Ore           | In Deads | Total                | In Ore | In Deads | Total        | In Ore | In Deads  | Total | In Ore | In Deads | Total                | Headings | Total                        | lbs. | per ton             |  |                    |  |  |  |          |  |          |  |              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                    |            |                  |          |                      |        |          |              |        |           |       |        |          |                      |          |                              |      |                     |  |                    |  |  |  |          |  |          |  |              |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱..... Rodderup .....✱

Nentsbury      ...      Tons in Deads      ...

Rodderup      ...      Tons in Deads      ...

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 173          | 10/3          |              |               |
| February  | 240          | 15/1          |              |               |
| March     | 264          | 14/3          |              |               |
| April     | 174          | 18/10         |              |               |
| May       | 190          | 13/9          |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report on the Nenthead Mines June 1944

| <u>REPORT ON THE</u>                |                   |                             |                  |                |
|-------------------------------------|-------------------|-----------------------------|------------------|----------------|
| <u>NENTHEAD</u><br>@@@@@@@@@@@@@@@@ |                   | <u>MINES</u><br>@@@@@@@@@@@ |                  |                |
| <u>JUNE</u><br>@@@@@@@              |                   | <u>1944</u><br>@@@@@@@      |                  |                |
|                                     | <u>Nentsbury.</u> | <u>Rampgill.</u>            | <u>Rodderup.</u> | <u>Totals.</u> |
| Ore Mined                           | Nil.              | Taken over<br>by N.F.M.D    | 320 Tons         | 320 Tons       |
| Ore Milled                          | "                 |                             | 320 "            | 320 "          |
| Pb. Concs. prdcd.                   | "                 |                             | 23.55 "          | 23.55 "        |
| % Recovery                          | "                 |                             | 7.36%            | 7.36%          |
| Hours Worked                        | "                 |                             | 65 hrs           | 65 hours       |
| Tons per hour                       | "                 |                             | 4.92 Tons        | 4.92 Tons      |
| Witherite in stock                  | 5.25 Tons         |                             | Nil              | 5.25 "         |

---

| <u>STOCKS.</u>                                                         |                   |                  |                  |                |
|------------------------------------------------------------------------|-------------------|------------------|------------------|----------------|
|                                                                        | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
| Crude Ore                                                              | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| Galena in stock, at Rodderup, 53.932 Tons.                             |                   |                  |                  |                |
| Witherite in stock, at Nentsbury, 5.25 Tons (estimated, probably more) |                   |                  |                  |                |
| Fluor Spar produced and sold, Nil.                                     |                   |                  |                  |                |

---

Compressed Air, produced at Nenthead, Nil.

Compressed Air, produced at Rodderup, by electrical energy and water  
~~xxxxx~~ power, about 750 cu.ft.  
per min. at a pressure of 80/85  
lbs. per sq. inch at face.

---

## **NENTHEAD MINES JUNE 1944**

NENTSBURY MINE. Inspected weekly. Main levels kept in order.

MILL. Although an agreement in course of preparation by Messrs. Blackburn & Main for the renting by Messrs. Jas. H. Harrison of Nentsbury Mill from the V.M. Zinc Co., has not yet been signed, preliminary terms have been agreed and the document will be signed when it has been approved by both parties in its final form. Briefly these terms are: From June 1st 1944, Jas. H. Harrison will pay the V.M. Co. £500 per annum for the use of the Mill, insure the engine, and pay the premium on the existing Policy, maintain the plant and be liable for any costs for damages etc. arising out of the working of the Mill and accept responsibility for any obligations under our lease as applicable to Nentsbury Mill. The period is for one year, or earlier termination of the War, but can be determined earlier by one month's notice from either party.

The Mill will be inspected monthly by an official of the V.M. Co. for the purpose of seeing the it is maintained by Jas. H. Harrison in the condition in which it is let.

The £500 per annum is more than we first anticipated receiving, and with the £375 Per annum for the use of the water by N.F.M.D., will more than cover the cost of maintaining the watercourses, the rent due to Lord Allendale for Nentsbury Mine and the rent due to the Admiralty for Nentsbury Mine area and Perry Dam.

RODDERUP MINE. From June 12th to June 17th (both dates inclusive) employees both in the mine and on the surface, had a holiday with pay, in accordance with the regulations laid down by the Government and the Transport and General Workers' Union.

The new Incline has been carried down 60 ft. and an air pipe-line laid. From development done in the Flats going East, and under the main level, it has been found that the richest ore is in the bottom of the Tynebottom Limestone and even in the top of the Whetstone Bed. All exploratory work done so far indicates that the ore is richer in the bottom of the limestone and, as the limestone is dipping slightly East, it has been found necessary to continue the incline right down to the Whetstone bed and much further than was anticipated originally.

From careful weekly inspections, I consider that whereas the ore from the middle to the top portion of the limestone will yield an average grade of 6 to 7% Galena, the bottom portion, of about 6 ft., of the limestone will yield ore of, as far as can be seen, from 9 to 10% Lead ore. The former grade of 6 to 7% is unpayable. The bottom portion of from 9 to 10½ will meet costs if we can break about 125 tons per week.

We have not bought a new rock-drill since August 1938, since when we have maintained, as best we could, such drills as we then had, and used them.

These drills are now inefficient, when compared with new improved drills. We are therefore testing in July - if a new drill can be obtained from Messrs. Holman Bros - their new "Silver Bullet" automatic Stoper, and, if the results are what we have been led to expect, we shall purchase this and probably two more. The object is to try to obtain double the quantity of ore broken with the same labour cost. Under war conditions we cannot get more efficient labour and the only



possible means of breaking more ore is with improved machines. There appears to be a wide area of good ore in the bottom of the Limestone, and the new incline, when completed, will go straight from the Blackburn Level to the bottom of the Limestone and three branch levels will lead off to three working Flats now being opened up. I do not anticipate this work being completed before mid-August. If the rich ore now in sight in the bottom of the limestone continues, the prospects are that output will be increased for many months.

MILL. In good order.

#### SALES.

Lead Ore Sold to Messrs. Walkers Parker and Messrs. Morris Ashby Ltd., the latter firm, after much difficulty for many months in securing shipping permits, having sent us definite instructions for 33½ Tons of 5/15. and 3/5 mm. Lead Ore in Kegs, the first parcel of which will be despatched early in July.

Gravel & Stone. The month's sales of these amounted to 488.25 Tons.

GENERAL. In my May report, I stated that N.F.M.D. had not paid the V.M. Co. for the ore they purchased from the Co., and which was broken before Nentsbury Mine was closed on Dec. 18th 1943. We sent statements to N.F.M.D. several times. On July 2nd, we wrote the London Secretary and demanded payment amounting to £821, made up of about £20 balance due on the Middlings sold and on the Lead and Zinc contents of the ore based upon the agreed assay values, and deducting 9s/- Per ton for treatment charges, which was the provisional figure given us in January of this year. On July 3rd. we received a statement from the London office, with a cheque for £1163. 14. 5. The statement showed that the cost of treatment was 4s/8d per ton, and not 9s/- the provisional cost given us. This settled the amounts outstanding in respect of both the Middlings and the Nentsbury Ore, and we benefitted by 4s/4d per ton on both materials. On July 7th, we received a letter from Mr. W. C. Rose, the Assistant Controller, in which he stated that the treatment cost of 4s/8d did not include any capital or depreciation charges or London office expenses, nor did it contain transport charges as we delivered the ore to the Mill. The capital charges, Mr. Rose stated, would be about 1s/- to 2s/- per ton, and it would therefore seem, that this with the transport cost, which I consider would not be less than 1s/6d per ton, would make the cost of treating the dump material about 8s/2d per ton. Based on this cost, and taking into consideration the price paid for Zinc Concentrates, £7. per ton f.o.r. Alston for 55% Zn., and Lead Concentrates of 78% Pb about £11. f.o.r. Alston, the monthly quantities treated and tonnages of Zinc and Lead Concentrates produced, must show a heavy loss.

Rodderup Mine - June 1944.

Development Footage: Nil.

West Central Flats.

J. Johnson & Partners.

131 Days Worked.

|           | L  | W    | S.F.  | S.M.    | H   | C.F.   | C.M.    |                |
|-----------|----|------|-------|---------|-----|--------|---------|----------------|
| Flat N.W. | 9  | x 16 | - 144 | - 13.38 | x 8 | - 1152 | - 32.62 | - J. Johnson   |
| " E.      | 12 | x 13 | - 156 | - 14.49 | x 8 | - 1248 | - 35.34 | ) T. Jackson   |
| " N.E.    | 10 | x 13 | - 130 | - 12.08 | x 8 | - 1040 | - 29.45 | )              |
| " " "     | 7  | x 15 | - 105 | - 9.75  | x 8 | - 840  | - 23.78 | - L. Armstrong |
| Sump      | 15 | x 6  | - 90  | - 8.36  | x 3 | - 270  | - 7.64  | - J. Emerson   |
| Incline   | 28 | x 8  | - 224 | - 20.81 | x 5 | - 1120 | - 31.71 | - H. Peart.    |

5670 - 160.54 @ Days Wages

Tonnage to Mill:- 320

Wages Paid: £126:19: 5.

Cost per Cu.M.:- 15s/10d.

(12s/5d without Holiday Pay).

# MINE STATISTICS

June 1944

|           | Tons of Ore Mined. |      |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |              | Days Worked. |         |           |       |        |         | Tons per Miner's Day |          |      | Cubic Metres per Miner's Day |          |       | Per Underground Man |       |          | Wages paid per Miner's Day |          |       | Wages paid per Underground Man |         |   | Wages paid per Cubic Metre |      | No. of Drills Working |  | Dynamite |  |
|-----------|--------------------|------|-------|------------------|---------|-------|----------------------|---------|--------------|--------------|---------|-----------|-------|--------|---------|----------------------|----------|------|------------------------------|----------|-------|---------------------|-------|----------|----------------------------|----------|-------|--------------------------------|---------|---|----------------------------|------|-----------------------|--|----------|--|
|           |                    |      |       |                  |         |       |                      |         |              | Miners       |         | Labourers |       |        |         |                      |          |      |                              |          |       |                     |       |          |                            |          |       |                                |         |   |                            |      |                       |  |          |  |
|           | Headings.          | Dev. | Total | In Ore           | In Dead | Total | In Ore               | In Dead | Bar-<br>Dead | In Ore       | In Dead | Wages     | Total | In Ore | In Dead | Total                | Headings | Dev. | Total                        | Headings | Total | Headings            | Total | Headings | Total                      | Headings | Total | lbs.                           | per ton |   |                            |      |                       |  |          |  |
|           |                    |      |       |                  |         |       |                      |         |              |              |         |           |       |        |         |                      |          |      |                              |          |       |                     |       |          |                            |          |       |                                |         |   |                            |      |                       |  |          |  |
| Nentsbury |                    |      |       |                  |         |       |                      |         |              |              |         |           |       |        |         |                      |          |      |                              |          |       |                     |       |          |                            |          |       |                                |         |   |                            |      |                       |  |          |  |
| ...Mos Av |                    |      |       |                  |         |       |                      |         |              |              |         |           |       |        |         |                      |          |      |                              |          |       |                     |       |          |                            |          |       |                                |         |   |                            |      |                       |  |          |  |
| ...Mos Av |                    |      |       |                  |         |       |                      |         |              |              |         |           |       |        |         |                      |          |      |                              |          |       |                     |       |          |                            |          |       |                                |         |   |                            |      |                       |  |          |  |
| Rodderup  | 820                | -    | 820   | 100              | -       | 100   | 200                  | 200     | -            | 200          | 131     | -         | 19    | -      | 150     | 244                  | 244      | 1.22 | 1.22                         | 2.13     | 1.06  | 1914                | -     | 1914     | 1915                       | 1915     | 1812  | 1812                           | 912     | 4 | 317                        | 0.99 |                       |  |          |  |
| 5 Mos Av  | 4418               | -    | 4418  | 209              | -       | 209   | 212                  | 212     | -            | 212          | 195     | -         | 24    | -      | 222     | 223                  | 223      | 1.05 | 1.05                         | 2.00     | 0.94  | 1512                | -     | 1512     | 1512                       | 1512     | 1611  | 1611                           | 718     | 4 | 325                        | 0.74 |                       |  |          |  |
| 12 Mos Av | 4423               | -    | 4423  | 201              | -       | 201   | 210                  | 210     | -            | 210          | 187     | -         | 23    | -      | 210     | 220                  | 220      | 1.07 | 1.07                         | 2.00     | 0.95  | 1513                | -     | 1513     | 1513                       | 1513     | 1614  | 1614                           | 710     | 4 | 320                        | 0.77 |                       |  |          |  |

## COMPARATIVE STATEMENT.

Nentsbury      Tons in Dead      Rodderup      Tons in Dead

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 173          | 19/3          |              |               |
| February  | 240          | 15/1          |              |               |
| March     | 209          | 14/5          |              |               |
| April     | 174          | 13/10         |              |               |
| May       | 190          | 13/9          |              |               |
| June      | 100          | 13/2          |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

Note:- The results marked \* are relatively higher than they would have been if there were no incidence of "Holiday Day" of one week's normal wage to each miner, for which expenditure there is no corresponding quantity of cubic metres or tonnage. These higher figures are levelled out in the six months' averages, and will be further reduced, so far as they are affected by "Holiday Day", as the year progresses. The figures for cubic metres, tonnage, and days worked, are the actual returns for June 1944.

## Report on the Nenthead Mines July 1944

REPORT ON THE

NENTHEAD  
@@@@@@@@@@@@@@@@

MINES  
@@@@@@@@@@@@

JULY 1944  
@@@@@@ @@@@@@

|                    | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------|-------------------|------------------|------------------|----------------|
| Ore mined          | Nil.              | Taken over       | 435 Tons         | 435 Tons       |
| Ore milled         | "                 | by N.F.M.D.      | 435 "            | 435 "          |
| Pb. Concs. prdcd.  | "                 |                  | 40.55 "          | 40.55 "        |
| % Recovery         | "                 |                  | 9.32%            | 9.32%          |
| Hours Worked       | "                 |                  | 87 hrs.          | 87 hrs.        |
| Tons per hour      | "                 |                  | 5.00 Tons        | 5.00 Tons      |
| Witherite in stock | "                 |                  | Nil.             | Nil.           |

---

STOCKS.

|           | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------|-------------------|------------------|------------------|----------------|
| Crude Ore | Nil               | Nil              | 2500 Tons        | 2500 Tons      |

Galena, in stock at Rodderup, 45.596 Tons.

Witherite, in stock Nil

Sold during month 6.000 "

(The stock of Witherite was 5.25 Tons to which was added 0.75 Tons picked from small scattered heaps to make up the 6 Tons necessary to secure the lower transport rate from the Railway Co.)

Fluor Spar, in stock Nil.

produced Nil.

---

Compressed Air, produced at Nenthead, Nil.

Compressed Air, produced at Rodderup by Water Power and Electrical Energy, approx. 750 cu.ft. per minute at a pressure of 80/85 lbs. per square inch at face.

---

## **NENTHEAD MINES**

### **JULY 1944**

NENTSBURY MINE. Inspected weekly and main levels kept in order.

MILL. Owing to shortage of staff, Messrs. Blackburn & Main have not yet had time to prepare the draft Agreement between the V.M. Co. and Jas. H. Harrison. There is no alteration to the terms briefly outlined in my last report.

RODDERUP MINE. The ore in the bottom of the Tynebottom Limestone, going East, is maintaining its value and the outlook is encouraging. The increased output indicates a higher recovery per ton of mine ore from 7.36% in June to 9.32% in July. The completion of the new incline was held up owing to a longer extension eastwards. The weakness of the roof also compelled us to both Timber and build concrete pillars with cement blocks to prevent the roof collapsing. As our number of employees is small, we were obliged to stop most mining work for three days towards the end of the month and shall have to continue with this work whenever possible during the early part of August. Directly the incline is completed and the roof made safe, there should be an increase of ore broken and, I hope, an increase in concentrates produced. The new Holman "Silver Bullet" drill was delivered late in July. Up to the end of the month, it was not possible to put it into operation for the reasons given above.

MILL. In good order.

#### SALES.

Lead Ore. The first 11 Tons of Lead Ore in kegs was despatched to the order of Messrs. Morris Ashby Ltd., in July, and the balance of 22.50Tons will be despatched early in August. Bulk ore containing most of the slime lead was sold to Messrs. Walkers Parker & Co., Ltd., Newcastle.

The quantity of bulk ore was 37.886 Tons. Total sales of Lead Ore was 48.886 Tons.

Gravel & Stone. During the month 420.90 Tons was sold at the usual prices.

GENERAL. In the latter part of 1943 our solicitors asked the District Valuer for the Government to consider an agreement between the V.M. Co. and the N.F.M.D. re: the payment for water supplied to N.F.M.D. by the V.M. Zinc Co. We were informed by the District Valuer that in the National interest the N.F.M.D. Ltd. wanted to put the mill into operation at once, and they therefore required a maximum of 500 gallons of water per minute. After several meetings at Carlisle and Nenthead, we agreed to supply the 500 gallons per minute if N.F.M.D. would pay the V.M. Co. £375 per annum. They undertook to pay at the rate of £375 per annum and early in 1944 actually paid us for the water supplied as and from July 19th 1943 to December 31st 1943. In July, this year we sent N.F.M.D. an account for £187. 10. 0. for the six months ended June 30th 1944. Towards the end of July, the new District Valuer requested a meeting either at Carlisle or at Nenthead, between Mr. J. Jackson, representing N.F.M.D., the District Valuer himself, for the Government, and Mr. MacPhail, of Messrs. Blackburn and Main, and myself, representing the V.M. Co. This took

place at Carlisle on Aug. 1st. It seems that after many months, the Treasury Solicitor considered an Agreement to be drawn up, not between the V.M. Co. and N.F.M.D. Ltd., but between the V.M. Co. and the Ministry of Supply, the terms and conditions to be very similar to those given us in 1943. Several small points required elucidation and hence the meeting. This matter is now in the hands of the Treasury Solicitor, and Messrs. Blackburn & Main, acting for the V.M. Co.

On behalf of the V.M. Co., Mr. MacPhail asked the District Valuer and Mr. Jackson, if they knew when the Mineral Valuer, Leeds, was likely to deal with the question of the, V.M. Co.'s claim for compensation in respect of the dumps. These gentlemen replied that it was a matter which would only be dealt with by the Mineral Valuer. In reply to a letter, dated 18th July, from Messrs. Blackburn & Main, the Mineral Valuer replied on July 24th as follows: -

"As I have already stated, the Royalty question is at present being investigated by the Solicitors to the Ministry of Supply and the Greenwich Hospital Solicitors. With regard to the Claim under Regulation 51A, paragraph 4 (I) (11), I have further considered my offer of the 15th November last in the light of the information which you have now supplied, and consider that it is a fair and reasonable one, having regard to the very enhanced tonnage of material removed by the Ministry. I may say that it has been decided that Income Tax is not deductible at the source from payments made under paragraph 4 (1) and (11) of Regulation 51A.

If you think a further interview would serve any useful purpose in arriving at a settlement and you are prepared to agree the payment under 4 (1) and (11) and to leave the payments in respect of Royalty in abeyance until a settlement has been reached between the Solicitors I shall be glad if you would suggest an appointment."

On August 2nd Mr. MacPhail wrote me as follows with regard to the letter he had received from the Mineral Valuer, viz: -

"As we did not have time yesterday to discuss the Mineral Valuer's letter perhaps you will let me know whether you wish to see me first before I reply to the letter. I shall not actually be attending Alston until Saturday, August 12th, but as there has been so much delay on the part of the Mineral Valuer there is no urgency for an immediate reply. If the Mineral Valuer is not prepared to discuss a settlement except on the basis of 3d per ton of material then there would be no object in having a further meeting. I can hardly think that this is the decision he has now come to."

I quite agree with Mr. MacPhail that there is a need to reply immediately to the Mineral Valuer's letter, and I hope therefore to discuss the matter with him on August 12th at Alston.

Rodderup Mine - July 1944.

Development Footage: Nil.

West Central Flats.

J. Johnson & Partners.

179½ Days Worked.

|         | L  | W    | S.F.  | S.M.    | H   | C.F.        | C.M.          | )              |
|---------|----|------|-------|---------|-----|-------------|---------------|----------------|
| N. Flat | 18 | x 13 | - 234 | - 21.74 | x 8 | - 1872      | - 53.00       | - J. Johnson   |
| N.E. "  | 22 | x 13 | - 286 | - 26.57 | x 8 | - 2288      | - 64.78       | - L. Armstrong |
| E. "    | 33 | x 10 | - 330 | - 30.66 | x 8 | - 2640      | - 74.75       | - T. Jackson   |
|         |    |      |       |         |     | <u>6800</u> | <u>192.53</u> |                |
|         |    |      |       |         |     | <u>4210</u> | <u>119.21</u> |                |
|         |    |      |       |         |     |             |               |                |

Sump

11010 - 311.74 @ Days Wages.

Tonnage to Mill:- 435

Wages Paid: £136: 2: 3.

Cost per Cu.M.:- 8s/9d.

MINE STATISTICS

July 1944

|           | Tons of Ore Mined. |      |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |       | Days Worked. |         |       |           |         |       | Tons per Miner's Day |         |       | Cubic Metres per Miner's Day |         |       | Per Underground Man |              |          | Wages paid per Miner's Day |       |          | Wages paid per Underground Man |          |       | Wages paid per Cubic Metre |       |      | No. of Drills Working |      | Dynamite |       |
|-----------|--------------------|------|-------|------------------|---------|-------|----------------------|---------|-------|--------------|---------|-------|-----------|---------|-------|----------------------|---------|-------|------------------------------|---------|-------|---------------------|--------------|----------|----------------------------|-------|----------|--------------------------------|----------|-------|----------------------------|-------|------|-----------------------|------|----------|-------|
|           | Headings.          | Dev. | Total | In Ore           | In Dead | Total | In Ore               | In Dead | Total | Miners       |         |       | Labourers |         |       | In Ore               | In Dead | Total | In Ore                       | In Dead | Total | Tons                | Cubic Metres | Headings | Dev.                       | Total | Headings | Total                          | Headings | Total | Headings                   | Total | lbs. | per ton               |      |          |       |
|           |                    |      |       |                  |         |       |                      |         |       | In Ore       | In Dead | Total | In Ore    | In Dead | Total |                      |         |       |                              |         |       |                     |              |          |                            |       |          |                                |          |       |                            |       |      |                       | Bar- |          |       |
|           |                    |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                      |         |       |                              |         |       |                     |              |          |                            |       |          |                                |          |       |                            |       |      |                       |      | Dead     | Wages |
|           |                    |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                      |         |       |                              |         |       |                     |              |          |                            |       |          |                                |          |       |                            |       |      |                       |      |          |       |
| Nentsbury |                    |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                      |         |       |                              |         |       |                     |              |          |                            |       |          |                                |          |       |                            |       |      |                       |      |          |       |
| ...Mos Av |                    |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                      |         |       |                              |         |       |                     |              |          |                            |       |          |                                |          |       |                            |       |      |                       |      |          |       |
| ...Mos Av |                    |      |       |                  |         |       |                      |         |       |              |         |       |           |         |       |                      |         |       |                              |         |       |                     |              |          |                            |       |          |                                |          |       |                            |       |      |                       |      |          |       |
| Rodderup  | 485                | -    | 485   | 312              | -       | 312   | 134                  | -       | 134   | 25           | -       | 25    | -         | 25      | -     | 25                   | 205     | 241   | 173                          | 173     | 212   | 151                 | 151          | 151      | 151                        | 101   | 101      | 712                            | 4        | 261   | 051                        |       |      |                       |      |          |       |
| ...Mos Av | 423                | -    | 423   | 261              | -       | 261   | 210                  | -       | 210   | 23           | -       | 23    | -         | 23      | -     | 23                   | 210     | 226   | 107                          | 107     | 200   | 095                 | 158          | 158      | 158                        | 158   | 141      | 141                            | 710      | 4     | 226                        | 077   |      |                       |      |          |       |
| ...Mos Av | 424                | -    | 424   | 217              | -       | 217   | 200                  | -       | 200   | 23           | -       | 23    | -         | 23      | -     | 23                   | 209     | 228   | 117                          | 117     | 205   | 104                 | 157          | 157      | 157                        | 151   | 151      | 719                            | 4        | 217   | 074                        |       |      |                       |      |          |       |

COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱..... Rodderup .....✱

Nentsbury      Tons in Dead      .....

Rodderup      Tons in Dead      .....

Wages paid per Cubic Metre in Headings as suggested by your letter of 3rd June, 1932.

Nentsbury

|            |  |
|------------|--|
| ...Mos Av. |  |
| ...Mos Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 173          | 19/3          |              |               |
| February  | 240          | 15/1          |              |               |
| March     | 209          | 14/8          |              |               |
| April     | 174          | 18/10         |              |               |
| May       | 140          | 13/4          |              |               |
| June      | 100          | 18/2          |              |               |
| July      | 312          | 10/-          |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |



## Report on the Nenthead Mines August 1944

### REPORT ON THE NENTHEAD MINES

AUGUST 1944.

|                    | <u>Nentsbury.</u> | <u>Rampgill.</u>          | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------|-------------------|---------------------------|------------------|----------------|
| Ore Mined          | Nil               | Taken over<br>by N.F.M.D. | 200 Tons         | 200 Tons.      |
| Ore Milled         | "                 |                           | 200 "            | 200 "          |
| Pb. Concs. prdcd.  | "                 |                           | 26.88 "          | 26.88 "        |
| % Recovery         | "                 |                           | 13.44%           | 13.44%         |
| Hours worked       | "                 |                           | 48 XXXX hrs.     | 48 hrs.        |
| Tons per hour      | "                 |                           | 4.17 Tons        | 4.17 Tons      |
| Witherite in stock | "                 |                           | Nil              | Nil.           |

**NOTE:** The low tonnage mined and milled was caused by a fall of ground in Blackburn Level, just above the new incline. As a result the water flowing out Blackburn Level flooded the Flats below and a fall of ground (Plate) buried the pump. A second pump had to be lowered and it took several days to pump out the water and nearly three weeks to secure the ground before drawing of ore could safely be carried out. In the meantime, the Mill employees cleaned the Slime pits and washed the residues. Hence the low mine tonnage milled and the high extraction percentage. A.T.

### STOCKS.

|                                       | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|---------------------------------------|-------------------|------------------|------------------|----------------|
| Crude Ore                             | Nil.              | Nil.             | 2500+Tons        | 2500 Tons.     |
| <u>Galena</u> , in stock at Rodderup, |                   |                  | 39.846 Tons      |                |
| <u>Witherite</u> ,                    |                   |                  | Nil.             |                |
| <u>Fluor Spar</u> (none produced)     |                   |                  | Nil.             |                |

Compressed Air, produced at Nenthead, Nil.

Compressed Air, produced at Rodderup, by Water Power & Electrical Energy, 650 cu.ft. per minute at a pressure of 80/85 lbs. per square inch, at face.

## **NENTHEAD MINES AUGUST 1944**

NENTSBURY MINE. Inspected periodically and main levels kept in order.

MILL. The draft agreement for the leasing of Nentsbury Mill by the V.M. Co. to James H. Harrison, Newcastle, was submitted by Messrs. Blackburn & Main to me for approval and afterwards sent to J. H. Harrison who approved of the draft, and, as soon as one of the partners of the firm returns to business, it will be signed by them and returned to us. Mr. Hallett and I will sign it for the V.M. Co. The terms are as outlined in my report for the month of June 1944. The sum of £500 per annum, which we shall receive as rent, plus the £375 per annum received from N.F.M.D. for the service of Water to Rampgill, will cover all costs for both rents for Nenthead and Nentsbury and labour costs.

RODDERUP FELL MINE. As reported last month, the fall in the level retarded our work in August, but more than we anticipated and three concrete pillars built with concrete blocks varying from 8 ft. long by 4 ft. wide by 12 ft. high, filled in the middle with deads and concrete, to 6 ft. long by 4 ft. wide by 12 ft. high and 4 ft. x 4 ft. x 12 ft., had to be built. The ground in this area is weak over the vein and with a plate roof is dangerous.

Moreover, the Cross vein running S.E. by N.W., varying in width from a few inches to over a foot, and completely cutting the strata makes conditions even more dangerous. Repairs., as far as can be seen, have completely supported the ground in this area and the Blackburn Level now permits the water to flow out the level. Owing to scarcity of labour, we had to cease producing ore to enable us to use the miners to carry out necessary repairs.

The new "Holman Silver Bullet" drill is giving very satisfactory results, and is by far the best drill we have. Reference to the low tonnage end output of concentrates is given on Page 1.

In July, our mine haulage contractor, who has had increases of pay during the past two years, asked for a further increase of 5s/- per day for man and horse. The horse was owner-driven, the owner had on more than one occasion refused to carry out the terms of the contract agreed to by him and the V.M. Co. in 1942. I refused to accede to his request, for a further increase and told him if he was not satisfied, he could give one month's notice to terminate the contract. He gave notice on the 1st August to terminate on the 31<sup>st</sup> August. In the meantime, I went carefully into the cost of paying a driver and purchasing a horse for the Company and feeding it. The comparison in cost was decidedly in favour of the Co. owning a horse to do the work. About the middle of August, I asked the contractor if he wished to withdraw his notice and carry out the terms of the 1942 agreement at the existing rate of pay. I told him it would be cheaper for the Company to own a horse, and whereas he objected to doing work outside, when not fully employed inside the mine, with his horse, the Co. could employ its own horse anywhere. His reply was that he wished his notice to terminate to stand. I therefore made enquiries and bought a horse, which appeared most suitable, before the end of the month, and am satisfied that the change is to the advantage of the Company. Compared with many Companies

we do not get much trouble with labour, but conditions generally are sometimes difficult, and Government owned concerns, financed by the Government through the Ministry of Supply provided with capital from taxpayers' money, pay such high rates that privately owned concerns find it difficult to carry on without loss.

MILL. In good order.

SALES.

Lead. During the month, a further parcel of 22.50 Tons of 3/15 mm. ore was sold to Messrs. Morris Ashby Ltd., London, and 41.176 Tons of Bulk ore was sold to Messrs. Walkers Parker Co. Ltd., Newcastle.

Gravel. Sales amounted 118.75 Tons. Sales will amount to more in September.

GENERAL. Although in July, a meeting in Carlisle, referred to in July report, indicated that N.F.M.D. Ltd. were inclined to hold up the payment of £187. 10s. 0. for water supplied to them by the V.M. Co. up to June 30th 1944, a strong letter had the effect of obtaining payment for the amount in August. This Co. has now paid for all water supplied to June 30th 1944. It is most difficult to obtain any settlement with the Government officials. There seems to be many departments and a host of officials employed, and what one department agrees to, another does not. Up to date the Mineral Valuer has not agreed to pay more than 3d per ton for the dump material. This sum, both Mr. Hallett and I agree, is too little end on behalf of the Co. we have refused to accept it. Both the question of payment for the dumps, and the Royalty on Concentrates produced, are unsettled and no payments made, nor has any settlement been made in regard to Rampgill building and the damage done to the plant there. Everything has been kept to date and claims made on behalf of the Company. It is possible that once the Germans are driven out of Belgium, as seems probable soon, the Co.'s officials from Head Office will be able to come over and support, or otherwise, the demands we have made on their behalf. I hope this will soon be possible.

Rodderup Fell Mine

Development Footage: Nil.

West Central Flats.

Jos. Johnson & Partners.

173 Days worked.

Sump Measurements to 31st Aug. 1904.

| L  | W    | H   |                   |
|----|------|-----|-------------------|
| 25 | x 17 | x 5 | - 2125 cu. ft.    |
| 59 | x 13 | x 5 | - 3835 " "        |
| 15 | x 12 | x 5 | - 900 " "         |
| 20 | x 9  | x 5 | - 900 " "         |
| 28 | x 9  | x 5 | - <u>1260</u> " " |

9020 " "

June 270 cu. ft. )

Jul 4210 " " ) deduct 4480 " "

Ground cut in August 4540 cu. ft. equals 128.55 cu.M.

Tonnage to Mill: 200 Tons

Wages Paid: £130:17:11

Cost per Cu.M.:— 20s/4d.

| MINE STATISTICS    |  |       |  |                  |  |          |  |                      |  | August 1944 |  |              |  |        |  |                      |  |          |  |                            |  |          |  |                                |  |       |  |                            |  |       |  |                       |  |          |  |      |  |      |  |
|--------------------|--|-------|--|------------------|--|----------|--|----------------------|--|-------------|--|--------------|--|--------|--|----------------------|--|----------|--|----------------------------|--|----------|--|--------------------------------|--|-------|--|----------------------------|--|-------|--|-----------------------|--|----------|--|------|--|------|--|
| Tons of Ore Mined. |  |       |  | Cubic Metres Cut |  |          |  | Tons per Cubic Metre |  |             |  | Days Worked. |  |        |  | Tons per Miner's Day |  |          |  | Wages paid per Miner's Day |  |          |  | Wages paid per Underground Man |  |       |  | Wages paid per Cubic Metre |  |       |  | No. of Drills Working |  | Dynamite |  |      |  |      |  |
| Headings.          |  | Dev.  |  | In Ore           |  | In Deads |  | Total                |  | In Ore      |  | In Deads     |  | Total  |  | In Ore               |  | In Deads |  | Total                      |  | Headings |  | Dev.                           |  | Total |  | Headings                   |  | Total |  | lbs.                  |  | per ton  |  |      |  |      |  |
| Nentsbury          |  |       |  |                  |  |          |  |                      |  |             |  |              |  |        |  |                      |  |          |  |                            |  |          |  |                                |  |       |  |                            |  |       |  |                       |  |          |  |      |  |      |  |
| Rodderup           |  |       |  |                  |  |          |  |                      |  |             |  |              |  |        |  |                      |  |          |  |                            |  |          |  |                                |  |       |  |                            |  |       |  |                       |  |          |  |      |  |      |  |
| 1 Mos Av           |  |       |  |                  |  |          |  |                      |  |             |  |              |  |        |  |                      |  |          |  |                            |  |          |  |                                |  |       |  |                            |  |       |  |                       |  |          |  |      |  |      |  |
| 8 Mos Av           |  |       |  |                  |  |          |  |                      |  |             |  |              |  |        |  |                      |  |          |  |                            |  |          |  |                                |  |       |  |                            |  |       |  |                       |  |          |  |      |  |      |  |
| 200                |  | - 200 |  | 128              |  | - 128    |  | 157                  |  | - 28        |  | - 1910       |  | - 1910 |  | 115                  |  | 115      |  | 0.70                       |  | 152      |  | 152                            |  | 152   |  | 152                        |  | 232   |  | 232                   |  | 1410     |  | 160  |  | 0.50 |  |
| 424                |  | - 424 |  | 217              |  | - 217    |  | 200                  |  | - 28        |  | - 209        |  | - 209  |  | 228                  |  | 228      |  | 1.17                       |  | 157      |  | 157                            |  | 157   |  | 157                        |  | 157   |  | 79                    |  | 817      |  | 0.74 |  |      |  |
| 896                |  | - 896 |  | 2010             |  | - 2010   |  | 1492                 |  | - 28        |  | - 2071       |  | - 2071 |  | 215                  |  | 215      |  | 1.12                       |  | 1510     |  | 1510                           |  | 1510  |  | 1510                       |  | 1510  |  | 918                   |  | 155      |  | 0.70 |  |      |  |
| Nentsbury          |  |       |  |                  |  |          |  |                      |  |             |  |              |  |        |  |                      |  |          |  |                            |  |          |  |                                |  |       |  |                            |  |       |  |                       |  |          |  |      |  |      |  |
| 1 Mos Av           |  |       |  |                  |  |          |  |                      |  |             |  |              |  |        |  |                      |  |          |  |                            |  |          |  |                                |  |       |  |                            |  |       |  |                       |  |          |  |      |  |      |  |
| 8 Mos Av           |  |       |  |                  |  |          |  |                      |  |             |  |              |  |        |  |                      |  |          |  |                            |  |          |  |                                |  |       |  |                            |  |       |  |                       |  |          |  |      |  |      |  |

| COMPARATIVE STATEMENT. |              |               |              |               |           |              |               |              |               |
|------------------------|--------------|---------------|--------------|---------------|-----------|--------------|---------------|--------------|---------------|
| Nentsbury              |              |               |              |               | Rodderup  |              |               |              |               |
| Month                  | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. | Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
| January                |              |               | 173          | 19 1/2        | January   |              |               |              |               |
| February               |              |               | 240          | 15 1/2        | February  |              |               |              |               |
| March                  |              |               | 264          | 14 1/2        | March     |              |               |              |               |
| April                  |              |               | 174          | 18 1/2        | April     |              |               |              |               |
| May                    |              |               | 190          | 16 1/2        | May       |              |               |              |               |
| June                   |              |               | 160          | 18 1/2        | June      |              |               |              |               |
| July                   |              |               | 31 1/2       | 10 1/2        | July      |              |               |              |               |
| August                 |              |               | 128          | 23 1/2        | August    |              |               |              |               |
| September              |              |               |              |               | September |              |               |              |               |
| October                |              |               |              |               | October   |              |               |              |               |
| November               |              |               |              |               | November  |              |               |              |               |
| December               |              |               |              |               | December  |              |               |              |               |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

Note: - The figures for August have been severely affected by falls of ground, which severely interfered with mining operations & explained in the monthly report for August.

COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱..... Rodderup .....✱

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 178          | 19/3          |              |               |
| February  | 240          | 15/1          |              |               |
| March     | 214          | 14/8          |              |               |
| April     | 174          | 18/10         |              |               |
| May       | 190          | 16/9          |              |               |
| June      | 100          | 18/1          |              |               |
| July      | 812          | 10/-          |              |               |
| August    | 128          | 23/2          |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|              |  |
|--------------|--|
| ... Mos. Av. |  |
| ... Mos. Av. |  |

Note:- The figures for August have been severely affected by falls of ground, which severely interfered with many operations & explained in the monthly report for August.

## Report on the Nenthead Mines September 1944

REPORT ON THE  
NENTHEAD MINES.  
 @@@@@@@@@@@@@@@@@@ @@@@@@@@@@  
SEPTEMBER 1944  
 @@@@@@@@@@@@@@@@@@ @@@@@@@@

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u>         | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------|--------------------------|------------------|----------------|
| Ore Mined         | Nil.              | Taken over<br>by N.F.M.D | 353 Tons         | 353 Tons       |
| Ore Milled        | "                 |                          | 353 "            | 353 "          |
| Pb. Concs. prdcd. | "                 |                          | 28.65 "          | 28.65 "        |
| % Recovery        | "                 |                          | 8.11%            | 8.11%          |
| Hours worked      | "                 |                          | 71 hrs           | 71 hrs         |
| Tons per hour     | "                 |                          | 4.97 Tons        | 4.97 Tons      |

---

STOCKS.

|           | <u>Nentsbury</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------|------------------|------------------|------------------|----------------|
| Crude Ore | Nil.             | Nil.             | 2500 Tons        | 2500 Tons      |

Galena in stock at Rodderup, 37.45 Tons

Witherite Nil

Fluor Spar (none produced) Nil.

---

Compressed Air, produced at Nenthead, Nil.

Compressed Air, produced at Rodderup, by electrical energy ~~and water~~  
 600 c.ft. per min. at a pressure  
 of 80-85 lbs. per sq. inch at  
 face.

---

## **NENTHEAD MINES SEPTEMBER 1944**

NENTSBURY MINE. Inspected periodically and main levels kept in order.

MILL. The Mill has been let to J. H. Harrison through the three sons trading under this name. The agreement has been signed by the three partners and by Mr. B. T. Hallett and myself on behalf of the V.M. Co.

RODDERUP MINE. Several small fissures crossed two of the three flats being worked during the month and cut out most of the rich ore in the two flats driven E. The Whetstone bed upon which the rich ore was found in the bottom of the Limestone was thrown up at least 2 feet. Part of the rock which had to be broken to carry the main tramlines forward had to be picked and used for filling, and, as a consequence, the ore from these two flats sent to the Mill was less in quantity and lower in grade. This accounts for the lower output sent to the Mill and the lower quantity of concentrates produced. Towards the end of the month, richer ore was found in one of the Flats going E.

HAULAGE. I reported last month that I had purchased a horse to do the haulage from the mine to the mill. This arrangement has proved to be advantageous and directly in the Co.'s interest. Whereas in the past, the haulage contractor would only work as and when he pleased and would often stay at home without informing the foreman and only draw the quantity of ore broken irrespective of whether or not such quantity of ore broken was a reasonable day's work for a man and horse, we can, under the new arrangement, use the horse for whatever work is required to be done and when we wish it to be done. The cost of the horse and equipment, amounting to just over £100, if all is well, will be redeemed in less than a year, and, if the inconvenience and loss caused by the contractor staying home when he pleased is taken into account, in much less than a year.

MILL. In good order.

### SALES.

Lead Ore. No lead ore was sold during the month. Messrs. Walkers Parker & Co. to whom we sold the bulk ore, requested us to send the ore to Chester. We pointed out to this firm that the cost of transport to N. Wales would be much greater than to Newcastle, and as they wished us to send the ore on at the rate of one truck of 12 tons per week, the cost of representation would be much more than in the case of bulk deliveries of 50 Tons at one time. After much correspondence Messrs. Walkers Parker agreed to pay the extra cost of transport to Chester, and the extra cost of representation. We therefore agreed to send one truck weekly, 4 trucks to complete a parcel, and the first truck will be despatched early in October. Enquiries from the British Pyros White Lead Co., Ltd, who have been closed for over a year through lack of labour, have been received, and they hope to reopen their works shortly. They have asked us to supply the 28 Tons still undelivered on their last permit. The price of the 3/5 mm. ore to Pyros will yield us at least a nett £5 per ton more than selling to the Smelters.

Gravel. During the month 403.35 Tons of Stone & Gravel were sold.

GENERAL. During the month, a further letter from the Mineral Valuer, re: the dumps, was considered by Messrs. Blackburn & Main and myself, and we agreed, as did Mr. Hallett, that the Mineral Valuer's suggested offer of 3d per ton was not sufficient and Mr. MacPhail (Solicitor) was instructed to write the Mineral Valuer to that effect. We all considered the Co.'s best course would be, either to go before a Tribunal to have the matter settled, unless in the meantime, the Mineral Valuer, acting for the Ministry of Supply, made us a reasonable offer, or wait until restrictions were removed and we could get in touch with Head Office. There seems to be so many Government departments acting in one way and another, none apparently with the authority to make a definite reasonable offer that it is just as well to wait now and see what the Government will do. The Co.'s claims have been submitted in detail, and so far as the Co. is concerned nothing more can be done until the Government make a definite offer when, as stated above, the Co. can ask to go before a tribunal.

Mr. Hallett has been kept fully informed.

| <u>R o d d e r u p   F e l l   M i n e .</u> |    |      |       |                           |     |        |                        |
|----------------------------------------------|----|------|-------|---------------------------|-----|--------|------------------------|
| <u>Development Footage: Nil.</u>             |    |      |       |                           |     |        |                        |
| <u>West Central Flats.</u>                   |    |      |       |                           |     |        |                        |
| <u>Jos. Johnson &amp; Partners.</u>          |    |      |       | 177 Days Worked.          |     |        |                        |
|                                              | L  | W    | S.F.  | S.M.                      | H   | C.F.   | C.M.                   |
| New Incline                                  | 31 | x 14 | - 484 | - 40.32                   | x 4 | - 1736 | - 49.15                |
| Old Incline                                  | 30 | x 14 | - 420 | - 39.02                   | x 8 | - 3360 | - 95.14                |
| N. Flat                                      | 27 | x 10 | - 270 | - 25.08                   | x 5 | - 1350 | - 38.22                |
| E. Flat                                      | 40 | x 12 | - 480 | - 44.59                   | x 5 | - 2400 | - 67.96                |
|                                              |    |      |       |                           |     | 8846   | - 250.47 @ Days Wages. |
| Tonnage to Mill:- 353 Tons                   |    |      |       |                           |     |        |                        |
| Wages paid: £134: -: 3.                      |    |      |       | Cost per Cu.M.: - 10s/9d. |     |        |                        |



| MINE STATISTICS    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        | September           |       |        |          |                            |      |         |  |                                |  | October |  |                            |  |  |  |                       |  |          |  | 1911 |  |  |  |  |  |  |  |  |  |
|--------------------|------|-------|--------|------------------|-------|--------|----------|----------------------|--------|----------|-------|--------------|----------|-------|--------|-----------|-------|--------|----------|----------------------|--------|----------|-------|------------------------------|----------|-------|--------|---------------------|-------|--------|----------|----------------------------|------|---------|--|--------------------------------|--|---------|--|----------------------------|--|--|--|-----------------------|--|----------|--|------|--|--|--|--|--|--|--|--|--|
| Tons of Ore Mined. |      |       |        | Cubic Metres Cut |       |        |          | Tons per Cubic Metre |        |          |       | Days Worked. |          |       |        |           |       |        |          | Tons per Miner's Day |        |          |       | Cubic Metres per Miner's Day |          |       |        | Per Underground Man |       |        |          | Wages paid per Miner's Day |      |         |  | Wages paid per Underground Man |  |         |  | Wages paid per Cubic Metre |  |  |  | No. of Drills Working |  | Dynamite |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       | Miners       |          |       |        | Labourers |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  | Bar. |  |  |  |  |  |  |  |  |  |
| Headings.          | Dev. | Total | In Ore | In Deads         | Total | In Ore | In Deads | Total                | In Ore | In Deads | Total | In Ore       | In Deads | Total | In Ore | In Deads  | Total | In Ore | In Deads | Total                | In Ore | In Deads | Total | In Ore                       | In Deads | Total | In Ore | In Deads            | Total | In Ore | In Deads | Total                      | lbs. | per ton |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       |              |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |
|                    |      |       |        |                  |       |        |          |                      |        |          |       | </           |          |       |        |           |       |        |          |                      |        |          |       |                              |          |       |        |                     |       |        |          |                            |      |         |  |                                |  |         |  |                            |  |  |  |                       |  |          |  |      |  |  |  |  |  |  |  |  |  |

COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱..... Rodderup .....✱

Nentsbury      ...      Tons in Deads      ...

Rodderup      ...      Tons in Deads      ...

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1911.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 173          | 19/8          |              |               |
| February  | 240          | 15/11         |              |               |
| March     | 264          | 14/8          |              |               |
| April     | 174          | 18/10         |              |               |
| May       | 190          | 16/9          |              |               |
| June      | 100          | 18/2          |              |               |
| July      | 512          | 10/-          |              |               |
| August    | 125          | 26/2          |              |               |
| September | 250          | 10/4          |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report on the Nenthead Mines October 1944

### REPORT

\*\*\*\*\*

on the

### NENTHEAD MINES

\*\*\*\*\*

OCTOBER 1944

\*\*\*\*\*

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------|------------------|------------------|----------------|
| Ore Mined         | Nil.              | Taken over       | 441 Tons         | 441 Tons       |
|                   |                   | by N.F.M.D.      |                  |                |
| Ore Milled        | "                 |                  | 441 "            | 441 "          |
| Pb. Concs. prdcd. | "                 |                  | 30.85 "          | 30.85 "        |
| % Recovery        | "                 |                  | 6.99%            | 6.99%          |
| Hours Worked      | "                 |                  | 88 hrs.          | 88 hrs         |
| Tons per hour     | "                 |                  | 5.01 Tons        | 5.01 Tons.     |

### STOCKS.

|                                                 | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-------------------------------------------------|-------------------|------------------|------------------|----------------|
| Crude Ore                                       | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| <u>Galena</u> in stock at Rodderup, 34.054 Tons |                   |                  |                  |                |
| <u>Witherite</u> Nil.                           |                   |                  |                  |                |
| <u>Fluor Spar</u> Nil. (None produced)          |                   |                  |                  |                |

Compressed Air produced at Nenthead Nil.

Compressed Air produced at Rodderup by Electrical Energy, 600 cu. ft. per minute at 80/85 lbs per sq. in. at face.

Note: A fall has occurred in the Middle Level at Rodderup, near the Hydro Compressor, and as a consequence, the water from the Hydro Compressor which flowed out the Middle Level is dammed back and when the Hydro is in operation, comes down the Shaft. Fearing possible damage to the Shaft, the Hydro was stopped until the level can be cleared but as this will mean employing part of our small Staff of miners and the reduction of the output, the clearing of the level may have to be suspended until more men are available. The winter is not a good time for going in the level when the water is dammed up.

## **NENTHEAD MINES OCTOBER 1944**

NENTSBURY MINE. Inspected periodically and the main levels kept in order. It is impossible to do more than maintain the main levels as only one foreman, H. Peart who is foreman at Rodderup, can be spared for this work at week-ends with the help of an assistant.

MILL. Kept in good order, maintained and operated by J. H. Harrison. It is inspected monthly by one of our officials.

RODDERUP MINE. The quantity of ore mined during the month, was 441 Tons. The quantity broken in September was 353 Tons. The percentage recovery of concentrates was 6.99% compared with a percentage recovery of 8.11% in September. The increased tonnage was due to the higher efficiency of the two Holman Silver Bullet rock-drills. The lower value of the ore mined in October was caused by four faults which crossed the Flats in a North-Western direction. One fault threw the strata up from 2 ft. to 3 ft. on the East side and whereas the tram road at the foot of the new incline was on the Whetstone Bed, at the bottom of the Tynebottom Limestone, the Whetstone Bed was thrown up on the East side of the Fault, which, to enable the tram-road to go forward on the same level, caused us to mine from 2 ft. to 3 ft. of barren rock. Knowing that the strata dips going East from our working in 1938 in the Flats in East End Shaft, it would be unwise to rise to the top of the Whetstone Bed at this point. It is most likely that faults somewhere East of us will throw the strata down - otherwise it would not be so far down in the East End Shaft. Unfortunately, these faults have for the time cut out the rich ore. Comparing the value in January 1944, 11.16%, February, 12.95%, and March, 11.87%, recovery in October was only 6.99%. The recovery at present is not high enough to meet all costs and since June of this year when the recovery in July was 9.32% (August month was a broken month owing to a bad fall underground), September 8.11% and October 6.99%\* losses have occurred monthly. Much thought has been given to the problem, but there seems no alternative to carrying on and hoping for higher grade ore being found, or closing the mine. Should the mine be closed, the cost of maintenance at Nenthead, Nentsbury, and Rodderup would amount to about as much as the present loss without any hope of an improvement in Rodderup Mine and the possibility of recouping some or all of the loss.

MILL. In good condition.

### SALES.

Lead Ore. During the month, 24.246 Tons of Bulk Lead Ore was despatched to Chester for Walkers Parker & Co., Ltd., part of a parcel of about 48 Tons to be sent. The balance will be despatched in Nov. 10 Tons was despatched to British Pyros White Lead Co., West Drayton, and the balance of about 18 tons will be despatched in November.

Gravel. During the month, 191.45 Tons of Gravel was sold. The present demand has had a seasonal fall to some extent.

GENERAL. On Oct. 19<sup>th</sup>, I received a letter from Messrs. Blackburn & Main, Solicitors, Carlisle, with a copy of a letter dated Oct. 17<sup>th</sup>, which they had received from the Mineral Valuer, headed Ministry of Supply, Tailings Dumps, Nenthead, Cumberland. The method employed by the Mineral Valuer for computing the valuation was very complicated. We worked out a valuation of the dumps, on the Mineral Valuer's method of computation, as we understood it, and sent a copy to Messrs. Blackburn & Main, asking them to write the Mineral Valuer for an example of his calculations in detail. Up to the end of the month we had not received a reply. It would appear that the British Government is adopting methods known only to themselves re: the valuing of the dumps. More than a year ago we sent in a claim showing in detail how we arrived at our figures. Since, we have had several meetings and much correspondence with all parties concerned. It does not seem now that we are much nearer an equitable solution.

Up to the end of October this year (1944) N.F.M.D. have treated about 233,576 Tons of dump material and recovered therefrom 7746.876 Tons (provisionally) of Zn. Concentrates which assayed from 56% to 57% Zn. And 783.476 Tons of Lead Concs. Which assayed approx. 75% Pb. All figures submitted by N.F.M.D. are given as "about" or "approximate" or "provisional". All that can be done is being done to obtain for the V.M. Co. equitable and just compensation. Copies of all correspondence are exchanged and both Messrs. Blackburn & Main and Mr. Hallett consulted re: all questions arising in connection with the dumps and Co.'s property at Nenthead.

| R o d d e r u p      M i n e.        |    |      |       |                        |     |             |                 |
|--------------------------------------|----|------|-------|------------------------|-----|-------------|-----------------|
| Development Footage: Nil             |    |      |       |                        |     |             |                 |
| <u>West Central Flats.</u>           |    |      |       |                        |     |             |                 |
| <u>Thos. Jackson &amp; Partners.</u> |    |      |       | 176 Days Worked.       |     |             |                 |
|                                      | L  | W    | S.F.  | S.M.                   | H   | C.F.        | C.M.            |
| Flat E.                              | 37 | x 10 | - 370 | - 34.37                | x 5 | - 1850      | - 52.38         |
| " N.E.                               | 25 | x 11 | - 275 | - 25.55                | x 5 | - 1375      | - 38.93         |
| Old Incline W.                       | 23 | x 13 | - 299 | - 27.78                | x 9 | - 2691      | - 76.19         |
| Flat N.                              | 25 | x 14 | - 350 | - 32.51                | x 5 | - 1750      | - 49.55         |
| Side.                                | 18 | x 6  | - 108 | - 10.03                | x 5 | - 540       | - 15.29         |
|                                      |    |      |       |                        |     | <u>8206</u> | - <u>232.34</u> |
| Tonnage to Mill:- 441.               |    |      |       |                        |     |             |                 |
| Wages Paid £133. 6. 2.               |    |      |       | Cost per Cu.M.:- 11/6. |     |             |                 |

## 19

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 173          | 14/8          |
| February  |              |               | 200          | 15/1          |
| March     |              |               | 209          | 14/5          |
| April     |              |               | 174          | 15/10         |
| May       |              |               | 190          | 15/9          |
| June      |              |               | 160          | 15/2          |
| July      |              |               | 512          | 10/-          |
| August    |              |               | 125          | 15/2          |
| September |              |               | 150          | 10/4          |
| October   |              |               | 152          | 11/0          |
| November  |              |               |              |               |
| December  |              |               |              |               |

## COMPARATIVE STATEMENT.

✠..... Nentsbury ..... ✠..... Rodderup ..... ✠

Wages paid, per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Wentbury

|            |  |
|------------|--|
| ..Mos. Av. |  |
| ..Mos. Av. |  |



# Report on the Nenthead Mines November 1944

## R E P O R T

@@@@@@@@@@

on the

# NENTHEAD MINES

N O V E M B E R 1 9 4 4

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u>          | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------|---------------------------|------------------|----------------|
| Ore Mined         | Nil.              | Taken over<br>by N.F.M.D. | 396 Tons         | 396 Tons       |
| Ore Milled        | "                 |                           | 396 "            | 396 "          |
| Pb. Concs. prdcd. | "                 |                           | 26.00 "          | 26.00 "        |
| % Recovery        | "                 |                           | 6.82 %           | 6.82 %         |
| Hours worked      | "                 |                           | 78 hrs           | 78 hrs.        |
| Tons per hour     | "                 |                           | 5.07 Tons        | 5.07 Tons      |

## STOCKS.

[illegible]

Compressed Air produced at Nenthead, Nil.

Compressed Air produced at Rodderup, by electrical energy 600 cu.ft.  
per minute, at 80/85 lbs per sq.  
in. at the face.

Note:

Owing to extreme wintery weather (snow and rain) it has not been possible with the small amount of labour available to do any repairs to the Middle Level. All surface water has been drained from around the Shaft top and diverted in a surface drain to the Blackburn.

A.T.

## **NENTHEAD MINES NOVEMBER 1944**

NENTSBURY MINE. Several small falls occurred in the Horse (main) Level during the month. These were repaired and the level kept in good repair from the mouth of the level up to Wellhope Shaft.

MILL. Operated by Jas. H. Harrison and maintained in good condition.

RODDERUP MINE. The weather during November was exceptionally wet and as a consequence the main level was often so deep that the horse was unable to draw the full load of five wagons and, on odd days, was unable to draw even light loads. The quantity of ore mined and milled was 396 Tons, v. 441 tons in October, and the quantity of concentrates produced was 26 tons v. 30.85 tons in October. The percentage recovery was 6.82% v. 6.99% in October. There was no improvement in the quality of the ore mined, and actually the grade fell by 0.17%. During the month, several letters have passed between Mr. Hallett, in London, and myself, and a report, prepared by Mr. Hallett from information supplied by me, was sent to Paris, after Mr. Hallett had submitted it to me for consideration, by Mr. Hallett on November 20th to be forwarded to Belgium for the consideration of the General Manager it was hoped. Up to the end of November, no reply had been received.

The general position in Rodderup is a critical one. The ore mined and the value of the ore, is insufficient to meet costs, and it is causing me much anxiety. We must consider, whether we should continue working the mine in the hope that richer ore will be discovered or place Rodderup on a maintenance basis. The position is briefly that during 1944, I estimate that the operating loss will be about £2500. Most of this loss occurred during the latter part of the year and at present the loss is approximately £400 per month. There are several things to be considered, a) If the mine and mill are closed down and the labour scattered, it will not be possible for the Company to get it back if they wish to later. Labour is directly controlled by the Ministry of Labour, and certainly will continue thus until the end of hostilities at least, b) There is the possibility that if the mine is closed, the Government might, as has been the case at Rampgill, requisition the mine, mill plant, and machinery, and pay little for it. This may not come to pass but with our 4½ year's experience with Government departments, every precaution should be taken as otherwise the Company may lose some of its plant and machinery. I am still hoping that a reply will be received at least by the end of 1944. I shall inspect Rodderup carefully up to the end of the year and give careful consideration to the general position and either ask Mr. Hallett to come here if such is possible to consult with me or by correspondence and telephone.

MILL. In good order.

### SALES.

Lead Ore. During the month, the balance of 24.059 Tons of Bulk Concentrates was despatched to Walkers Parker & Co., Ltd., Chester, and 18.081 Tons sent to Pyros White Lead Co., Ltd., West Drayton. Re: the latter, the actual agreed weight was not to hand at the end of Nov. and will not therefore be deducted



from the Weekly Report stock until during December. We received £14.406 per ton from Messrs. Walkers Parker, for concentrates which assayed 82.025% Pb., less £0.5 per ton transport, equals £13.906 per ton, and are due £19.50 per ton from the Pyros Co. for 3/5 mm. Lead Ore of approx. the same percentage. The Pyros Co. pay £5.594 per ton more than we receive from Walkers Parker & Co., but will not accept slime concentrates.

Gravel. Sales amounted to 193.30 Tons at the usual prices.

GENERAL. During the month Messrs. Blackburn & Main received a letter from the Mineral Valuer and an example of the method used by him in arriving at the figure of 3d per ton for the dump material. Neither they nor I could follow this method satisfactorily, and it was decided to place the correspondence in the hands of our auditors, Messrs. Greaves & Co., and ask them whether they could understand the method.

They informed us later in the month, per telephone, that they could understand the Mineral Valuer's method of calculation, but they were not sure whether the Mineral Valuer had given us a sufficiently high percentage of profit. They advised consulting an actuary on this point, and I instructed them to do so. Up to the end of December they had not received a reply from the actuary.

Up to the end of November, N.F.M.D. Ltd., had treated 253,363 Tons of dump material this year, and produced about 8409.936 Tons of Zn. concentrates and 832.129 Tons of Pb. Concentrates. For the month of November they treated 19,787 Tons of dump material from which they produced 663.06 Tons of Zn. Concs, assaying about 58.73% Zn, and 48.653 Tons (approx.) of Pb. Cones, assaying about 72% Pb. Up to date we have not received any compensation for dumps nor rent for Rampgill Mill, damage to the Mill and building, or Royalty for both Zinc and Lead Concentrates. A demand for Royalty has been sent each half-year.

| <u>R o d d e r u p      M i n e .</u> |    |      |       |         |                       |              |                 |   |
|---------------------------------------|----|------|-------|---------|-----------------------|--------------|-----------------|---|
| <u>Development Footage: Nil.</u>      |    |      |       |         |                       |              |                 |   |
| <u>West Central Flats.</u>            |    |      |       |         |                       |              |                 |   |
| <u>J. Johnson &amp; Partners.</u>     |    |      |       |         | 179 Days Worked.      |              |                 |   |
|                                       | L  | W    | S.F.  | S.M.    | H.                    | C.F.         | C.M.            | ) |
| Flat E.                               | 22 | x 15 | - 330 | - 30.66 | x 9                   | - 2970       | - 84.09         | ) |
| " N.                                  | 16 | x 11 | - 176 | - 16.35 | x 8                   | - 1408       | - 39.87         | ) |
| " N.                                  | 30 | x 15 | - 450 | - 41.80 | x 10                  | - 4500       | - 127.42        | ) |
| " N.W.                                | 15 | x 12 | - 180 | - 16.72 | x 10                  | - 1800       | - 50.97         | ) |
|                                       |    |      |       |         |                       | <u>10678</u> | - <u>302.35</u> |   |
| Tonnage to Mill:- 396                 |    |      |       |         |                       |              |                 |   |
| Wages Paid: £135: 12: 11.             |    |      |       |         | Cost per Cu.M.:- 9s/- |              |                 |   |



# MINE STATISTICS

19

|  | Tons of Ore Mined. |      |       | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked. |          |       |           |          |       | Tons per Miner's Day |       |        | Cubic Metres per Miner's Day |        |       | Per Underground Man |              |          | Wages paid per Miner's Day |       |          | Wages paid per Underground Man |          |       | Wages paid per Cubic Metre |         |        | No. of Drills Working |       | Dynamite |        |          |       |        |          |       |        |          |       |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--|--------------------|------|-------|------------------|----------|-------|----------------------|----------|-------|--------------|----------|-------|-----------|----------|-------|----------------------|-------|--------|------------------------------|--------|-------|---------------------|--------------|----------|----------------------------|-------|----------|--------------------------------|----------|-------|----------------------------|---------|--------|-----------------------|-------|----------|--------|----------|-------|--------|----------|-------|--------|----------|-------|-------|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
|  | Headings.          | Dev. | Total | In Ore           | In Deads | Total | In Ore               | In Deads | Total | Miners       |          |       | Labourers |          |       | In Ore               | Total | In Ore | Total                        | In Ore | Total | Tons                | Cubic Metres | Headings | Dev.                       | Total | Headings | Total                          | Headings | Total | lbs.                       | per ton |        |                       |       |          |        |          |       |        |          |       |        |          |       |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                    |      |       |                  |          |       |                      |          |       | In Ore       | In Deads | Total | In Ore    | In Deads | Total |                      |       |        |                              |        |       |                     |              |          |                            |       |          |                                |          |       |                            |         | In Ore | In Deads              | Total | Bar.     |        |          |       |        |          |       |        |          |       |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                    |      |       |                  |          |       |                      |          |       |              |          |       |           |          |       |                      |       |        |                              |        |       |                     |              |          |                            |       |          |                                |          |       |                            |         |        |                       |       |          | In Ore | In Deads | Total | In Ore | In Deads | Total | In Ore | In Deads | Total | Wages | gains |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |                    |      |       |                  |          |       |                      |          |       |              |          |       |           |          |       |                      |       |        |                              |        |       |                     |              |          |                            |       |          |                                |          |       |                            |         |        |                       |       |          |        |          |       |        |          |       |        |          |       |       |       |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

## COMPARATIVE STATEMENT.

..... Nentsbury ..... Rodderup .....

Nentsbury ..... Tons in Deads ....

Rodderup ..... Tons in Deads ....

Wages paid per Cubic Metre in Headings and Deads for your quarter of 3rd June, 1932.

Nentsbury

|                |  |
|----------------|--|
| ..... Mos. Av. |  |
| ..... Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 175          | 14/3          | 175          | 14/3          |
| February  | 240          | 15/1.         | 240          | 15/1.         |
| March     | 269          | 14/8          | 269          | 14/8          |
| April     | 174          | 18/10         | 174          | 18/10         |
| May       | 190          | 13/9          | 190          | 13/9          |
| June      | 160          | 18/2          | 160          | 18/2          |
| July      | 312          | 10/-          | 312          | 10/-          |
| August    | 198          | 23/2.         | 198          | 23/2.         |
| September | 250          | 10/9.         | 250          | 10/9.         |
| October   | 232          | 11/18         | 232          | 11/18         |
| November  | 302          | 9/-           | 302          | 9/-           |
| December  |              |               |              |               |

## Report on the Nenthead Mines December 1944

| <div style="text-align: center;"> REPORT<br/> on the<br/> NENTHEAD MINES<br/> DECEMBER 1944 </div> |                   |                           |                  |                |
|----------------------------------------------------------------------------------------------------|-------------------|---------------------------|------------------|----------------|
|                                                                                                    | <u>Nentsbury.</u> | <u>Rampgill.</u>          | <u>Rodderup.</u> | <u>Totals.</u> |
| Ore Mined                                                                                          | Nil               | Taken over<br>by N.F.M.D. | 369 Tons         | 369 Tons       |
| Ore Milled                                                                                         | "                 |                           | 369 "            | 369 "          |
| Pb. Concs. prdcd.                                                                                  | "                 |                           | 22.60 "          | 22.60 "        |
| % Recovery                                                                                         | "                 |                           | 6.11%            | 6.11%          |
| Hours worked                                                                                       | "                 |                           | 174 hrs.         | 174 hrs.       |
| Tons per hour                                                                                      | "                 |                           | 4.99 Tons        | 4.99 Tons.     |

---

| <div style="text-align: center;">STOCKS.</div>                                                                                         |                   |                  |                  |                |
|----------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------|------------------|----------------|
|                                                                                                                                        | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
| Crude Ore                                                                                                                              | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| <u>Galeana</u> , in stock at Rodderup, <u>40.514 Tons</u><br>(12.45 Tons wet of this despatched<br>dry weight not known December 31st) |                   |                  |                  |                |
| <u>Witherite</u> ,                                                                                                                     |                   |                  | Nil.             |                |
| <u>Fluor Spar</u> , (none produced)                                                                                                    |                   |                  | Nil.             |                |

---

Compressed Air produced at Nenthead, Nil.

Compressed Air produced at Rodderup by Electrical Energy, 600 cu.ft. per minute @ 80/85 lbs per sq. inch, at the face.

Note: Conditions are unchanged re: the water in the Middle Level and the clearing of the Level.

## **NENTHEAD MINES DECEMBER 1944**

NENTSBURY MINE. The main level has been repaired during the month. Slight falls occurred in three places - none were serious.

MILL. Operated by Jas. H. Harrison and maintained in good condition.

RODDERUP MINE. The wet weather experienced in November continued during most of December. There were also falls of snow, which followed by rain, caused flooding of the main level on several occasions. The quantity of ore mined was 369 Tons and the quantity of concentrates produced was 22.6 Tons. The percentage recovery fell from 6.82% to 6.11%. Four flats were worked from the foot of the new incline. The flat furthest East, No.1 and bearing slightly N.E., was 8 ft. in height and 12 ft. in width. The bottom 4 ft. was very poor and mainly in the grey bed and the Whetstone bed. The top 4 ft. contained mineral but not in payable quantities. A flat, No.2, 75 ft. West from the East Flat and bearing a few degrees W. of N., 8 ft. high and 10 ft. wide, was poor for mineral and the ore broken was not payable. A cross-fissure 18" wide at the top and 6" wide at the bottom completely cut the mineral out. A Flat, No.3, 18 ft. from No.2 Flat and bearing West was 8 ft. high and about 12" wide. This flat was driven in the bottom of the Limestone (Tynebottom) and carried payable ore throughout. No. 4 Flat was driven in a North Westerly direction from near No. 5 Flat and bearing out in what is virgin country, was 8 ft. high and about 8 ft. wide. The ore in this Flat was not as rich as in No.5, but there was mineral throughout. With the limited labour supply, I have instructed the foremen to discontinue work in Nos. 1 and 2 Flats, and concentrate working in No.3 and No.4 Flats only.

It is the best and only arrangement I can make to reduce the loss to a minimum, and when this has been done, I am afraid, unless the trade improves, the loss will be heavy. I hoped to have heard before now that Mr. Hallett had received, a reply to the report he sent to Paris, and to various letters sent by him containing all particulars up to the time he wrote and an estimate of the loss for 1944, and the approx., loss for December month. Mr. Hallett has not received a reply. Consequently, I have asked him to come to Nenthead, if convenient, early in January 1945, so that we can consider the general position and what action I should take for 1945. I am confident that unless we cut richer ore in Rodderup the loss in 1945 will be heavy, particularly as we have not, and cannot get sufficient labour to increase the tonnage mined to bear the unproportionately heavy Standing Charges. I am still hoping to hear from Mr. Hallett soon that he has heard from either France or Belgium, or that Mr. Hallett will come to see me here. In Sept. 1944, I wrote my son-in-law, a Lieutenant in the British Army and who was in Holland or Belgium, to try to pass on a message to Head Office. On the 21st Dec. I heard from him to the effect that he had passed on a message. I could not give him any detailed particulars respecting the mines, as, so far as I know, up to the end of Dec. 1944, we had not been informed we were allowed to communicate with Belgium which was an enemy-occupied territory. I also received a Post-card from Mr. Chaplain in December, 1944, which was posted from Montpellier, France, Oct. 26th 1944. He asked for information about the mines, but until the Custodian of Enemy Property releases me, I am

not allowed to send any communication This is the position now, January 5th 1945.

MILL. In good order and operating part- time daily.

SALES.

Lead Ore. During the month of December, 18.081 Tons were deducted from the stock shown in hand at the end of November. This had been despatched in November, but the dry weight was not known until about mid-December. We also despatched one truck of Lead Ore to Walkers Parker & Co., Chester, the wet weight being 12.45 Tons, but as the dry weight was not known on Dec. 31st, this truck-load is still shown in stock.

Gravel. Sales amounted to 252.8 Tons, @ 4s/6d per ton, and a further parcel of about 500 Tons produced and in stock, has been sold to the Cumberland County Council at 5s/- per ton on site, the V.M. Co. to help in loading the Council's lorries.

GENERAL. Up to the end of December we have not received a reply from our Auditors, who consulting an Actuary, re: the formula the Mineral Valuer used to arrive at a valuation per ton for compensation for the dump material treated by N.F.M.D. Neither have we been able to arrive at a settlement for rent due to the V.M. Co. for the use of Rampgill Mill building, from the date it was requisitioned in July 1942, or, for damage done to the building and the Company's machinery, nor has N.F.M.D. paid any Royalty for Lead and Zinc Concentrates produced. Claims have been sent yearly to N.F.M.D. for Royalty, and several meetings have been held here and in Carlisle with the District Valuer, when the Coy's solicitors was present, and on two or three occasions when the Mineral Valuer was present. There are therefore outstanding claims for rent of Rampgill Mill building, for damage to building and machinery, for dumps treated by N.F.M.D., and Royalty on concentrates produced. Basing calculations on written statements of tonnages treated, value of concentrates per ton, delivered Alston Station, and cost per ton of dump material treated, not including redemption of the cost of machinery erected, the loss up to the end of Dec. 1944, must have been a considerable sum.

Rodderup. In my Annual Report for 1944, I shall give in detail, particulars of the costs, output and general outlook for 1945. A careful inspection of the mine at the end of 1944, did not give much encouragement for 1945, and as the loss in mining during 1944 is likely to amount to about £2500 it seems to me that the loss for 1945, unless richer ore is discovered, will be considerably more. I hope that before I complete the annual Report, which will also contain an estimated Profit & Loss a/c for 1945, that Mr. Hallett will have received some information from Head Office, either from France or Belgium. Working at a loss, and the worry and anxiety of trying to get a reasonable settlement of the compensation due to the Coy. from N.F.M.D. Ltd.- a subsidiary of the Ministry of Supply and directed by several Government departments, and the additional work entailed in replying to their correspondence or meeting them for discussions causes me much anxiety.

R o d d e r u p   M i n e

Development Footage: Nil.

West Central Flats

J. Johnston & Partners.

158½ Days Worked.

|                   | L  | W    | S.F.  | S.M.    | H    | C.F.        | G.M.            |
|-------------------|----|------|-------|---------|------|-------------|-----------------|
| Flat E.           | 25 | x 15 | - 375 | - 34.84 | x 9  | - 3375      | - 95.56         |
| "    N.W.         | 24 | x 12 | - 288 | - 26.75 | x 10 | - 2880      | - 81.55         |
| Old Flat W.       | 12 | x 14 | - 168 | - 15.61 | x 10 | - 1680      | - 47.57         |
| "    Incline S.W. | 12 | x 10 | - 120 | - 11.15 | x 8  | - 960       | - 27.18         |
|                   |    |      |       |         |      | <u>8895</u> | - <u>251.86</u> |

Tonnage to Mill: 369

Wages Paid: £120: 1: 0.

Cost per Cu.M.: - 9s/6d.

---

December 1944

1964

|           | Tons of Ore Mined. |            | Cubic Metres Cut |         |         |       | Tons per Cubic Metre |         |        |         | Days Worked. |         |       |        |         |       | Tons per Miner's Day |         | Cubic Metres per Miner's Day |          | Wages paid per Miner's Day |       | Wages paid per Underground Man |       | Wages paid per Cubic Metre |       | Wages paid per ton of Ore |         | No. of Drills Working |      | Dynamite |       |
|-----------|--------------------|------------|------------------|---------|---------|-------|----------------------|---------|--------|---------|--------------|---------|-------|--------|---------|-------|----------------------|---------|------------------------------|----------|----------------------------|-------|--------------------------------|-------|----------------------------|-------|---------------------------|---------|-----------------------|------|----------|-------|
|           | Headings.          | Dev. Total | In Ore           |         | In Dead | Total | In Ore               | In Dead | Miners |         | Labourers    |         | Total | In Ore | In Dead | Total | In Ore               | In Dead | Total                        | Headings | Dev.                       | Total | Headings                       | Total | Headings                   | Total | lbs.                      | per ton |                       |      |          |       |
|           |                    |            | In Ore           | In Dead |         |       |                      |         | In Ore | In Dead | In Ore       | In Dead |       |        |         |       |                      |         |                              |          |                            |       |                                |       |                            |       |                           |         |                       |      | Bar-     |       |
|           |                    |            |                  |         |         |       |                      |         |        |         |              |         |       |        |         |       |                      |         |                              |          |                            |       |                                |       |                            |       |                           |         |                       |      |          | Wages |
| Nent-     |                    |            |                  |         |         |       |                      |         |        |         |              |         |       |        |         |       |                      |         |                              |          |                            |       |                                |       |                            |       |                           |         |                       |      |          |       |
| bury      |                    |            |                  |         |         |       |                      |         |        |         |              |         |       |        |         |       |                      |         |                              |          |                            |       |                                |       |                            |       |                           |         |                       |      |          |       |
| ...Mos Av |                    |            |                  |         |         |       |                      |         |        |         |              |         |       |        |         |       |                      |         |                              |          |                            |       |                                |       |                            |       |                           |         |                       |      |          |       |
| ...Mos Av |                    |            |                  |         |         |       |                      |         |        |         |              |         |       |        |         |       |                      |         |                              |          |                            |       |                                |       |                            |       |                           |         |                       |      |          |       |
| Rodderup  | 304                | -          | 304              | 252     | -       | 252   | 140                  | -       | 140    | 158     | -            | 158     | 158   | -      | 158     | 252   | 158                  | 158     | 252                          | 158      | -                          | 152   | 152                            | 152   | 152                        | 310   | 610                       | 5       | 310                   | 0.67 |          |       |
| ...Mos Av | 390                | -          | 390              | 221     | -       | 221   | 179                  | -       | 179    | 182     | -            | 17      | 199   | -      | 199     | 217   | 21                   | 200     | 111                          | 155      | -                          | 155   | 155                            | 155   | 1413                       | 711   | 4                         | 274     | 0.69                  |      |          |       |
| ...Mos Av | 504                | -          | 504              | 283     | -       | 283   | 177                  | -       | 177    | 180     | -            | 10      | 190   | -      | 190     | 215   | 124                  | 200     | 114                          | 155      | -                          | 155   | 155                            | 155   | 1310                       | 715   | 5                         | 172     | 0.69                  |      |          |       |

### COMPARATIVE STATEMENT.

✠..... Nentsbury .....✠..... Rodderup .....✠

|           |      |               |      |
|-----------|------|---------------|------|
| Nentsbury | .... | Tons in Deads | .... |
|-----------|------|---------------|------|

Rodderup  
...  
Tons in Deads  
....

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nontabulary

|  |             |
|--|-------------|
|  | .. Mos. Av. |
|  | .. Mos. Av. |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 178          | 10/3          |
| February  |              |               | 240          | 15/1          |
| March     |              |               | 269          | 14/5          |
| April     |              |               | 172          | 18/10         |
| May       |              |               | 140          | 15/9          |
| June      |              |               | 160          | 18/2          |
| July      |              |               | 312          | 10/-          |
| August    |              |               | 128          | 23/2          |
| September |              |               | 160          | 10/9          |
| October   |              |               | 252          | 11/6          |
| November  |              |               | 302          | 9/-           |
| December  |              |               | 157          | 3/10          |

**ANNUAL REPORT**  
**On the**  
**NENTHEAD MINES**  
**1944**

NENTSBURY MINE. In the Annual report on the Nenthead Mines, 1943, I reported that Nentsbury Mine was closed on Dec. 18th 1943. During 1944, the mine has been inspected periodically and the main level up to Wellhope Shaft kept in repair. It has not been possible to proceed very far East of the Wellhope Shaft in the main level owing to bad air. Inspection of the main level has been made frequently by H. Peart during week-ends and repairs either done by him with the assistance of two labourers, or, if not too extensive, by the two labourers. H. Peart is one of the two mine foremen at Rodderup Fell and is employed there, weather permitting, full time.

NENTSBURY MILL.

An offer was made by James H. Harrison, whose sons carry on a business founded by their father many years ago, to rent Nentsbury Mill from us. They own quarries and engineering works in Newcastle. The quarries are in Northumberland. This firm also owns the Hartside Barytes Mines which they opened up late 1940 or early 1941. The offer made by the firm was for the use of Nentsbury Mill to crush and wash Barytes ore, they to pay rent of £500 per annum for the use of the Mill, to maintain the Mill and to indemnify and keep indemnified the lessors (V.M. Co.) against all legal claims whatsoever except Landlord's property tax and compulsory War Damage Insurance. They also agreed to keep on the Insurance Policies held by the lessors with the British Engine Boiler & Electrical Insurance Co. and the Sun Insurance Office, in respect of the Crossley Engine & Starting Equipment. The agreement prepared by the Coy's Solicitors, Messrs. Blackburn & Main, gave effect to James H. Harrison for one year from June 1st 1944 or until the cessation of hostilities with Germany. The V.M. Co.'s officials have the right to inspect the machinery monthly. Each party has the right to terminate the agreement by giving one month's notice. After consultation with Mr. Hallett, the agreement was drawn up and both Mr. Hallett and I signed it on behalf of the V.M. Co. We considered that Nentsbury Mill could not be operated by the V.M. Co. without loss, until the war with Germany was over, and to obtain a revenue for the Co. sufficient to pay the fixed rent of Nentsbury Mine and to have the Mill kept in order with no expense to the Co., was a sound proposition. We also took into consideration the fact that if the Mill was not used by the Co., it might be requisitioned by the Government for their own use if they required a Mill of that type, and after our long experience with Government Control of Rampgill and the Nenthead dumps with, so far, no settlement of rents, damages or compensation, it was in the interest of the V.M. Co. to let the property reserving as has been done, the right of the V.M. Co. to take over its own property at any reasonable date should they choose to do so. Barytes is now realising a good price, the Government not having fixed a price for Barytes as they have done for Lead and Zinc. Unfortunately, such Sulphate and Carbonate of Barium as exist in Nentsbury Mine are associated with Lead and Zinc and cannot be properly separated by gravity methods.

There still remains in Nentsbury Mine, the ore reserves given in my report for the end of 1943 viz: Lead Ore reserves of 1217 Tons, and approximately 74.850 Tons of Mixed Lead-Zinc-Witherite Ore. The ore broken during 1943 and stocked outside for N.F.M.D. Ltd. was crushed by them early in 1944, and was paid for in June 1944. The tonnage was 1194.56 tons, dry weight, and the nett amount paid for the ore was £883.15, equal to 14.78s/- per ton. The Middlings referred to in 1943 Report, as having been delivered but not paid for and estimated to realise £1000, actually realised £1167.3 nett, for a dry weight of 483.71 Tons, the value per ton being £2.41.

Reviewing my Report for 1943, with the position today, I consider we adopted the most economical course in closing Nentsbury Mine in Dec. 1943.

#### RODDERUP FELL

The quantity of ore mined at Rodderup Fell during 1944 amounted to 4729 Tons. Concentrates recovered amounted to 446.78 Tons. The percentage recovery was 9.445%. These figures compare with 4835 Tons mined in 1943, from which 448.20 Tons of concentrates were recovered, the percentage recovery k being 9.235%. I regret to have to report that the grade of the ore mined fell from an average recovery of 11.818% for the first four months of 1944, to 6.93% the average recovery for the last four months of 1944. During the first six months of 1944 the value of the Lead Ore recovered about met the costs of working the Nenthead branch. During the latter half of 1944, there was a loss of approximately £2500

This loss must be regarded as an estimated mining lose only, until the auditors have audited the accounts, and must be accepted as loss on mining at Rodderup when all the expenses of maintaining Nentsbury Mine, Watercourses at Nenthead, and the Rents, Rates and Taxes, and all costs at Nenthead. Included in the revenue, is the Water Rent which N.F.M.D. have paid to June 30th and are due to pay up to Dec. 31st 1944, and the Rent of Nentsbury Mill from June 1st 1944 to end of that year, but it does not include any compensation to be recovered from N.F.M.D. for dumps treated.

During the latter three months of 1944 the monthly mining loss caused both Mr. Hallett and myself much anxiety.

On Nov. 20th, Mr. Hallett posted to Paris, a condensed report up to date for the past 6 years. The object of sending the report was to place the general position before the General Manager if at all possible and to ask his opinion re: continuing to work Rodderup at a loss, or closing the mine and placing it on a maintenance basis, which we are compelled to do under the lease. Mr. Hallett had not received a reply up to the end of 1944.

I have given above the average percentage of Lead Concentrates recovered from the ore broken during the first four months, viz: 11.818% and during the last four months of 1944 viz: 6.934%. In my Report for 1943, I stated that the outlook for 1944 was encouraging. This proved to be the case but gradually as the year advanced the values dropped almost monthly, until In Dec. 1944, the percentage recovery was 6.11%. Just before the end of 1944 I made a careful inspection of the mine and visited each working place. I give below an extract of what I stated in my December report, viz: -



"The wet weather experienced in November continued during most of December. There were also falls of snow, which, followed by rain, caused flooding of the main level on several occasions. The quantity of ore mined was 369 Tons and the quantity of concentrates produced was 22.6 Tons. The percentage recovery fell from 6.82, to 6.11%. Four flats were worked from the

foot of the new Incline. The Flat furthest East, No.1 and bearing slightly N.E., was 8 ft. in height and 12 ft. in width. The bottom 4 ft. was very poor and mainly in the grey bed and the Whetstone bed. The top 4 ft. contained mineral but not in payable quantities. A flat, No.2, 75 ft. West from the East flat and bearing a few degrees W. of N., 8 ft. high and 10ft. wide, was poor for mineral and the ore broken was not payable. A cross-fissure 18" wide at the top and 6" wide at the bottom, completely cut the mineral out. A Flat, No.3, 18 ft. from No.2 Flat and bearing West was 8 ft. high and about 12 ft. wide.

This Flat was driven in the bottom of the Tynebottom Limestone and carried payable ore throughout. No.4 Flat was driven in a North- Westerly direction from near No.3 Flat and bearing out in what is virgin country, and was 8 ft. high and about 8 ft. wide. The ore in this Flat was not as rich as in No.3, but there was mineral throughout. With the limited labour supply, I have instructed the foremen to discontinue work in Nos. 1 and 2 Flats, and concentrate working in Nos. 3 and 4 Flats only.

It is the best and only arrangement I can make to reduce the loss to a minimum, and when this has been done, I am afraid, unless the grade improves, the loss will be heavy. I hoped to hear from Mr. Hallett before now that he had received a reply to the report he sent to Paris, and to various letters sent by him containing all particulars up to the time he wrote and an estimate of the loss for 1944 and the approximate loss for December month. Mr. Hallett has not received a reply. "

The loss for November and December was approximately £780. The loss for the year up to the end of October was £1720. We have had to estimate the loss for the year, as up to date we have not received all the invoices for goods supplied up to the end of December 1944, neither have we been paid for Lead Ore sold and delivered. Also at the end of 1944 we had Lead Ore in stock and not delivered owing to the roads being blocked with snow, we estimate the loss for 1944 to amount to about £2500.

I am sorry to have to report that the immediate outlook for 1945 is not encouraging as unless richer ore is discovered the value of the ore in sight is not high enough to meet the costs of paying all expenses of Nenthead branch. The labour supply, besides being limited, is both expensive and, compared with pre-War efficiency, inefficient. The cost per cubic metre mined during 1944 fluctuated from 19s/3d to 9s/-, the average being 15s/5d for the year, compared with 16s/11d for 1943. These costs compare with pre-War costs (1939) of 7s/2d per cubic metre. The cost 1940 was 10s/7d, 1941, 12s/5d; 1942, 15s/8d; 1943, as given above, 16s/11d; and 1944, 15s/5d per cu. metre. The price of Lead has remained stationary at £25. per ton since Dec. 1939.

It should be appreciated that the profit shown in the Balance Sheet for 1943 was not a mining profit, but was profit after taking into account, 122,222 Tons of dump material trusted by N.F.M.D., at 6d. per ton, a price which the auditor considered should be regarded as reasonable as on one occasion 7d per ton was indicated by the Mineral Valuer as a reasonable figure. The auditors also pointed out that the loss incurred in 1938 should be reclaimed in 1943, otherwise if not claimed in 1943 no claim could be made later. A claim in respect of loss, in the matter of liability for Income Tax, becomes invalid after five years have elapsed. In the Balance Sheet for 1943, Trade debtors amounted to £6460. 11s. 11d., and included £3055. 11. due from N.F.M.D., for the 122,222 Tons at 6d. per ton, £500 which Greenwich Hospital Estates promised to pay the V.M. Co., from the first Royalty paid by N.F.M.D., and £90. 7s. 8d. due from F. J. Ryland, a total of £3647. 18s. 8d. The balance of £2812. 13s. 3d. has been paid during 1944. The latest offer suggested by the Mineral Valuer, for Nenthead dumps, is 3d Per ton which we have not accepted.

#### ORE RESERVES.

I can only state that the Ore Reserves, Dec. 1944 cannot be closely estimated, when the cost of mining now is compared with the pre-war costs, and the value in site now compared with the value in site Dec. 1943, are taken into consideration. Therefore, although I consider the quantity of ore in the mine, N. and S. of the vein, is equal to the tonnage given in 1943 Report, less 4729 tons and which amounts to 75310 Tons, probably of an average value of about 8% PbS, I do not consider the value of the ore on average is nearly sufficient to meet present day costs. There is the possibility of richer blocks of ore being found, but these, if they exist, can only be found by development. What the price of Lead will be after the War with Germany is over, is a matter of speculation, and regarding this I am not able to express an opinion.

#### SALES OF PRODUCTS.

##### Lead Ore

During the year, Lead Concentrates amounting to the whole of the year's production were sold to Messrs. Walkers, Parker & Co., Ltd., of Newcastle and Chester, a small quantity to Messrs. Morris Ashby Ltd., London, for export, and to the British Pyros White Lead Co. Ltd., of West Drayton. The price obtained from Messrs. Walkers Parker & Co. for 80.772% Pb. concentrates, averaged £13. 11s. 11d. per ton nett. The price received from Messrs. Morris Ashby Ltd., for 5/15 mm. Lead Ore of 82% Pb. and over, was £24. 10s. 0d. nett, and the price received from the Pyros White Lead Co. for 3/5 mm. concentrates of 81/82% Pb., was £19. 7s. 6d. per ton nett. All the output for 1944 was sold and all but 28 tons delivered. The balance was in stock Dec. 31st 1944.

Fluor Spar. None produced.

Witherite. 6 Tons only was sold at £5. 5. 0. per ton delivered Stockton-on-Tees.

Stone & Chippings. 3620.6 Tons was sold during the year, and realised £746. 16s. 6d. on site, the nett prices being 1s/4½d for stone and 4s/- to 4s/6d per ton for Chippings.

## GENERAL.

The year 1948 has been a difficult one, and especially the end of the year. Our Mill foreman at Rodderup Fell, Mr. Joseph Stephenson retired in April, having reached about 70 years of age. He had been in the Co.'s employ from the time the Co. came to Nenthead. Stephenson was a capable and conscientious man, and a willing servant of the Company. H. Millican, who had been in the Mill previously, and later in the mine as Mine Foreman, but whose health was not first-class (he had been Mine foreman since 1935) succeeded Stephenson, while H. Peart, Mine Foreman in Nentsbury Mine, succeeded Millican in Rodderup Mine.

Although the cost per cubic metre cut in Rodderup in 1944, was lower than for 1943, I do not consider the reduction was due to higher efficiency of the employees, but was due more to the purchase of better rock-drills and the completion of a new incline. Unless richer ore is discovered in 1945, I do not think we shall be able to reduce the cost per cubic metre nor maintain the same output. The loss will therefore be greater.

V.M. Co. v. N.F.M.D. Much correspondence and many interviews at Nenthead, Carlisle, and Alston, have taken place during the year, and the situation, with so many Government departments and officials either asking for interviews or taking part in discussions, became so involved that I refused to attend any more meetings unless the Co.'s solicitor was present. When interviews commenced in June 1940, I went to London and appeared

before the Non-Ferrous Ores Committee (later to be the Non-Ferrous Mineral Development Control) of which Sir William Larke was then Chairman and is now Controller and which is under the Ministry of Supply. Since that date up to early 1942, numerous engineers and Geologists came to Nenthead, all having been given power to a greater or less decree. Many reports were made on Nentsbury Mine, Rampgill Mill, and Nenthead Dumps. The dumps had been sampled and the results showed little difference in value from those obtained by the V.M.Z. Co.

Three 50-Ton parcels were taken, one each from Rampgill Heap, Hillersdon Terrace Heap, and Smallcleugh Heap, and tested in a Flotation Plant in Derbyshire. Copies of the reports on those tests are in my possession. In the first place, and at the first interview in 1940, I offered to sell the dumps at so much per ton, and to sell Rampgill Mill. To arrive at a value, it was considered that the V.M. Co. should appoint a Valuer to act for them, and the Government Control to appoint a Valuer on their behalf. N.F.M.D. Ltd was formed June 15th 1942, with a capital of £1000 only and is apparently a subsidiary or branch of the Ministry of Supply. It is worth noting that In April of that year the Control asked me to visit London and meet them, which I did. Sir Wm. Larke, Non-Ferrous Mineral Development Controller, is also Chairman of N.F.M.D. Ltd. In letters from Sir William he promised to buy the Mill and/or appoint a Valuer to represent N.F.M.D. and to give me as much time as possible to appoint a Valuer to represent the Coy. No notice was ever given, and it is worth noting that, within six weeks from N.F.M.D being registered, a requisition order was issued on Rampgill Mill Building, without any previous valuation being, agreed to or notice given, and the V.M. Co.'s machinery was being pulled down and thrown outside the building. We were informed and have been told repeatedly

that the Coy., would get full compensation. According to a circular issued to us, we had to make a claim for the building within six months from the date of the requisition order. This was done and the claim delivered by January 17th 1943. About that time, the District Valuer, who had had the matter in hand, had to refer it to the Mineral Valuer, who resided at Leeds, and he with his assistant and supported by N.F.M.D. Co.'s Consulting Engineer and Superintendent, arrived. Correspondence and interviews have been passing since. Many months ago, the District Valuer retired, and a new Valuer was appointed, with the result that the whole matter had all to be gone over again. In the mean-time, various rules and regulations have been made or altered and it is almost impossible to state what the position is today.

In 1943, 122,222 Tons of dump ore was treated from the three dumps, Rampgill, Hillersdon, and Smallcleugh, but mainly from Hillersdon dump. During 1944, 267,123 Tons was treated from the three dumps, from which 8930.936 Tons of Zinc Concentrates were produced averaging about 58% Zn., and 861.729 Tons of Lead Concentrates were produced averaging about 72% Pb.

Not a penny has been received from N.F.M.D. either for rent for Rampgill Mill, damages to Mill and Machinery, compensation for dumps, or Royalty. We have sent statements for Royalty each half-year and have had various meetings with our Solicitor present to try to come to some definite understanding re: compensation. It seems to me that the Government make orders to suit their own convenience and to get for nothing as much as they can grab. As a layman, I cannot consider this method, if it is the case, is equitable, neither does it seem British in character.

A matter we now have to consider, is what price per ton the Mineral Valuer will agree that N.F.M.D. will pay the V.M. Co. for the dump material used. When we made out our claim we based it on the gravel value, and calculated the percentage of gravel in the dumps over 3 mm. in size, and the price we received per ton for what we sold pre-war, viz: 3s/6d per ton on site, which we considered was a fair and just calculation. We were informed that we could not claim the value per ton obtainable now, which is from 4s/- to 4s/6d. per ton, as this increase was due to war conditions. The mineral Valuer, no doubt advised by the Treasury solicitor, stated we could not claim that price as the quantity previously sold per annum would take about 70 years to exhaust the dumps, and that we could only claim on a basis of so many years, not definitely stated, based on so much per cent plus 3% Sinking fund less Income Tax at 5s/- in the £. This matter has not yet been settled, and as stated in this report, the offer was 3d per ton, although the Mineral Valuer worked it out at 3.5d per ton, after Income Tax was deducted. Our Auditors and solicitor are at work on this offer, as neither consider the offer is reasonable. Assuming therefore that if the worst happens, and the Coy. is only allowed 3d per ton, the total quantity treated from July 1943 to Dec. 31st 1944, amounts to 389345 Tons which at 3d per ton amounts to £4866. 16. In last year's balance sheet, credit was taken for 122,222 Tons at 6d per ton, which amounted to £3055. 11s. 0d. There would therefore be the difference between £4866. 16. 3. and £3035. 11. 0., i.e. £1811. 5. 3. to be placed to the Co.'s credit against a mining loss of £2500.

The question of royalty for which we shall claim, will probably unless otherwise settled, if it can be proved that the V.M. Co. paid royalty on the quantity of dump material existing when they bought the property in 1896 go to the Landlords, less, of course, £500 which we have been promised by the Lords of the Admiralty from the first Royalty payment made.

To place both Rodderup and Nentsbury Mines on a maintenance basis, and maintain the water-courses etc. under the Nenthead lease, and meet all other reasonable claims, I consider will cost the Coy. about £3500 per annum. The only revenue to

meet the £3500 would be £500 from Jas. H. Harrison for Nentsbury Mill, if they continue to use it for one year, and £375 for Water Rent from N.F.M.D. if this firm continues working until the end of 1945. It might be assumed that should N.F.M.D. continue they would treat upwards of 200,000 Tons, which I doubt, and should they do so, the value at 3d per ton would be £2500, if ever it is paid. Working as we are at present, I consider the loss is likely to amount to £5000 per annum disregarding any credit we might obtain for dump material treated, but taking into consideration the £875 per annum rents detailed above. Without the latter, the loss would be £5875 per annum, which would be decreased by whatever amount we might receive from Harrison and/or N.F.M.D. according to the period during which they continue to work.

The actual difference there-fore between the loss of £3500 to maintain mines and plant etc., at Nenthead, Nentsbury and Rodderup, and the loss incurred working as we are at present, is £2375.

The £875 represents the revenue for a full year. The total revenue from these sources for 1944 is £666. 13s. 4., of which we have so far received £354. 3. 4., £187. 10. 0. being still due from N.F.M.D. for Water Rent, July-Dec. 1944 and £125. 0. 0. from Harrisons for rent of Mill, Oct-Dec. 1944.

It might be possible to employ a smaller number of men in Rodderup Mine and Mill, to produce Lead Concentrates to the value of £2000/£3000 per annum, and at the same time maintain Nenthead and Nentsbury property as at present. This seems to be the only suggestion I can make at present. Of course, the grade of ore in Rodderup might improve if we continued working even on the small scale suggested. I am however valuing the mine as I saw it, at the end of 1944 and as it is now, the yield being 6.11%. This suggestion could be modified to cover periods of four or six months, balance Sheets being made at the end of each period. Should Rodderup mine and Mill be closed, it must be definitely understood that there will be little possibility of re-opening until hostilities cease, and probably not for some time after. Employees will all be directed to work elsewhere, probably some of them, if not all, outside this district, and should any be employed in this area, we probably would be unable to get them back.

The Co. must consider (a) Continuing to work as at present, (b) Continuing to work on a smaller scale, as suggested above, which would retain some of our employees and might possibly result in a higher grade of ore being reached, (c) placing the whole agency at Nenthead and Rodderup on a maintenance basis (d) surrendering the leases, by giving notice, and then selling the plant and machinery, which under present war conditions will not realise much, as a bright future for non-ferrous mining cannot be visualised by private enterprise, with taxation at its present level, the price of Lead fixed, and labour controlled.

The outlook for 1945, is not promising therefore.

Particulars supplied to Mr. B. T. Hallett, relating to the financial position at the end of the year were as follows, viz: -

|                                                          |                      |        |
|----------------------------------------------------------|----------------------|--------|
| No.1 A/c Martins Bank Alston Dec. 31 <sup>st</sup> 1944. | £7540. 13. 11.       | Credit |
| No.2 A/c Martins Bank Alston Dec. 31 <sup>st</sup> 1944. | £1638. 0. 0.         | Credit |
|                                                          | <u>£9178. 13.11.</u> | Credit |

|                                 |                    |
|---------------------------------|--------------------|
| Approx. Amount owed by V.M. Co. | £697. 9. 11.       |
| Approx. Amount owed to V.M. Co. | <u>£610. 2. 8.</u> |
| Debit difference                | <u>£87. 7. 3.</u>  |

May I be allowed to state I have given what I consider is a fair and just report both of 1944 and of the prospects for 1945.

I have again to record my appreciation of the help I have received from Me. Hallett during 1944, during a trying and anxious year, to Mr MacPhail, senior partner of Messrs. Blackburn & Main, Solicitors, Carlisle, and to the Staff generally, who have been loyal and considerate under trying conditions. No special bonus has been paid to the staff during the year, and no increase of salary, although Income Tax has varied from 6s/- to 10s/- in the £., and the cost of living has remained equally as high during 1944 as in 1943.

13<sup>th</sup> January 1945.

## Report on the Nenthead Mines January 1945

## R E P O R T

000000000000

on the

NENTHEAD MINES

[illegible]

J A N U A R Y 1 9 4 5

[illegible]

|                   | <u>Nentsbury.</u>       | <u>Rampgill.</u>       | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------------|------------------------|------------------|----------------|
| Ore Mined         | Let to Jas. H. Harrison | Taken over by N.F.M.D. | 323 Tons         | 323 Tons       |
| Ore Milled        | of Newcastle on Tyne.   |                        | 248 "            | 248 "          |
| Pb. Concs. prdcd. |                         |                        | 11.20 "          | 11.20 "        |
| % Recovery        |                         |                        | 4.55%            | 4.55%          |
| Hours Worked      |                         |                        | 32 hrs.          | 32 hrs.        |
| Tons per hour     |                         |                        | 4.77 Tons        | 4.77 Tons.     |

## STOCKS.

|           | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------|-------------------|------------------|------------------|----------------|
| Crude Ore | Nil.              | 75 Tons          | 2500 Tons        | 2575 Tons.     |

Galena in stock at Rodderup, 53.174 Tons (of which 24.975 Tons, including 12.45 Tons reported in Dec., is in course of transit.)

Witherite Nil.

Fluor Spar Nil.

Compressed Air produced at Nenthead, Nil.

Compressed Air produced at Rodderup, by electrical energy from  
400-500 cu.ft. per min. at 80/85 lbs. pressure  
at face.

January

Note: Weather conditions during ~~xxxxxxx~~ have been so bad that the main level was sometimes not accessible and mining was completely stopped for several days, and when the miners could get in the mine it was not possible to work economically. Snowstorms, frost, and rain blocked most roads in the district for 2 or 3 weeks, and blocked all main water-courses; consequently what water that could flow, ran over the banks and found its way by devious means into the mine.

## **NENTHEAD MINES JANUARY 1945**

NENTSBURY MINE. Main level up to Wellhope Shaft repaired and maintained in good condition.

MILL. Operated by Jas. H. Harrison and maintained in good condition.

RODDERUP MINE. January was one of the worst months in regard to weather, that I have ever known. There were heavy falls of snow interspersed with cold rain and, during most of the month, from 6 to 20 degrees of frost. Consequently, water-courses were blocked, and most of the water overflowed the banks of the water-courses, and eventually, when a thaw set in, found its way down the mine and out the main level. To maintain the watercourses as well as possible, most of the mill-men were employed on the hillside, and when not there, were keeping fires burning in the mill to keep what water there was available flowing through the pipes. In the mine, conditions were no better, and whether it was owing to the severe weather or some other unaccountable cause, some of the 4" air-pipes burst and had to be replaced. Water rose in the main flats and the miners had to break what ore they could and where they could. The result was less ore and a lower grade. The quantity broken and brought to the Mill was 323 Tons from which 11.20 Tons of Concentrates were recovered, equal to a recovery of 4.55%.

I have given much thought to the deposition of ore in the Flats, and the strata, where we are working. I have to confess I am puzzled. In the E. end Shaft, the Tynebottom Limestone is approximately 60' lower than at the foot of the old Incline. The distance from the foot of the old Incline to the E. End Shaft is about 1000 feet. The dip of the strata E. is therefore about 60' on a length of 1000', yet where we are working at present the strata is thrown up and the Whetstone Bed which was below ground level at the foot of the Incline is now about 4' above floor-level and all the Tynebottom Limestone is above us. There appears to be no other conclusion, than that between where we are now working and the E. End Shaft there must be one or more "throws" - otherwise the Tynebottom Limestone could not be 60' below us at the E. End Shaft.

I have therefore instructed the foremen to drill in the roof of the Flat to prove whether the ore is above us. We must have at least 16' of Limestone above our present roof. If there is no payable ore above us, there is not likely to be any below where we are working.

It is, of course, impossible to state what is before us going E. or going N. The general position is causing me much anxiety, and the loss for January, partly owing to weather conditions, will be heavy.

MILL. Except for being held up owing to lack of water, and weather conditions generally, the Mill ran satisfactorily and is in a good state of repair.

### SALES.

Lead Ore. From the Lead Ore shown in stock on January 31st, 24.975 Tons wet weight, including one truck, 12.45 Tons wet weight despatched in Dec., has to be deducted when the dry weight is known. We have therefore despatched



during January 12.525 Tons wet weight. The dry weight will not be known until a further two trucks of about 12 tons each have been despatched to complete a 48 Tons parcel have been despatched, when the moisture from each sample taken from each truck will be averaged with the weight of concentrates in each truck. In February, if the embargo is lifted by the Railway Co., we shall despatch what ore we can to the British Pyros White Lead Co., who have obtained a permit to purchase a further 31¾ tons.

Gravel. Owing to stormy weather only 110 Tons of gravel were sold during the month, and the Cumberland County Council were unable to remove what they had purchased from us.

#### GENERAL.

Owing to the illness of Mr. Hutchinson, one partners of Messrs. Greaves & Co., our auditors, we had not received a reply from them re: the formula used by the Mineral Valuer in assessing the value of the dump ore, by January Hoping that communication could be made with Head Office, we considered that rather than accepting a low price per ton, we would wait until we could be advised from Belgium. I do not think there is any doubt but what the Government will pay 5d per ton for all dump ore used, plus a rent for Rampgill building and compensation for damage done to machinery, and also Royalty when it is decided to whom it should be paid. We claimed £300 Per annum as rent for the building, and £50 for the use of the requisitioned land outside, in January 1943 but no definite claim has yet been submitted for damage to machinery, as not until N.F.M.D. remove their machinery can we assess the damage.

I am sorry to have to report that I have been suffering from Influenza and low blood pressure for a fortnight, and although allowed to attend to light office work, I have not been permitted to go outdoors or visit Rodderup Mine. I hope to be able to inspect the mine soon.

| <u>R o d d e r u p      M i n e .</u> |    |      |       |                          |      |             |                 |
|---------------------------------------|----|------|-------|--------------------------|------|-------------|-----------------|
| <u>West Central Flats.</u>            |    |      |       |                          |      |             |                 |
| <u>Development Footage: Nil.</u>      |    |      |       |                          |      |             |                 |
| <u>J. Johnson &amp; Partners.</u>     |    |      |       | 156½ Days Worked.        |      |             |                 |
|                                       | L  | W    | S.F.  | S.M.                     | H    | C.F.        | C.M.            |
| East Flat                             | 3  | x 12 | - 36  | - 3.34                   | x 9  | - 324       | - 9.17          |
| S. Flat X-cut                         | 10 | x 10 | - 100 | - 9.29                   | x 8  | - 800       | - 22.65         |
| N.W. Flat                             | 13 | x 16 | - 208 | - 19.32                  | x 14 | - 2912      | - 82.45         |
| W.(Old) Flat                          | 8  | x 10 | - 80  | - 7.43                   | x 12 | - 960       | - 27.18         |
|                                       |    |      |       |                          |      | <u>4996</u> | <u>- 141.45</u> |
| Tonnage to Mill:- 323                 |    |      |       |                          |      |             |                 |
| Wages Paid: £118. --. 10.             |    |      |       | Cost per Cu.M.:- 16s/8d. |      |             |                 |

MINE STATISTICS..... 1945

|           | Tons of Ore Mined. |      |       | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked. |          |       |           |       |       | Tons per Miner's Day |        |       | Cubic Metres per Miner's Day |       |      | Per Underground Man |          |      | Wages paid per Miner's Day |          |       | Wages paid per Underground Man |          |       | Wages paid per Cubic Metre |      |         | No. of Drills Working |  |  | Dynamite |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
|-----------|--------------------|------|-------|------------------|----------|-------|----------------------|----------|-------|--------------|----------|-------|-----------|-------|-------|----------------------|--------|-------|------------------------------|-------|------|---------------------|----------|------|----------------------------|----------|-------|--------------------------------|----------|-------|----------------------------|------|---------|-----------------------|--|--|----------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|----|
|           |                    |      |       |                  |          |       |                      |          |       | Miners       |          |       | Labourers |       |       |                      |        |       |                              |       |      |                     |          |      |                            |          |       |                                |          |       |                            |      |         |                       |  |  |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
|           | Headings.          | Dev. | Total | In Ore           | In Deads | Total | In Ore               | In Deads | Total | In Ore       | In Deads | Total | Bar-      | Wages | gains | Total                | In Ore | Total | In Ore                       | Total | Tons | Cubic Metres        | Headings | Dev. | Total                      | Headings | Total | Wages paid per Cubic Metre     | Headings | Total | Wages paid per ton         |      |         |                       |  |  |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
|           |                    |      |       |                  |          |       |                      |          |       |              |          |       |           |       |       |                      |        |       |                              |       |      |                     |          |      |                            |          |       |                                |          |       |                            | lib. | per ton |                       |  |  |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |    |
| Nentsbury |                    |      |       |                  |          |       |                      |          |       |              |          |       |           |       |       |                      |        |       |                              |       |      |                     |          |      |                            |          |       |                                |          |       |                            |      |         |                       |  |  |          |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | </ |

COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱..... Rodderup .....✱

Nentsbury ..... Tons in Deads .....  
Rodderup ..... Tons in Deads .....

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 141          | 16/8          |
| February  |              |               |              |               |
| March     |              |               |              |               |
| April     |              |               |              |               |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report on the Nenthead Mines February 1945

| REPORT<br>on the<br>NENTHEAD MINES<br>FEBRUARY 1945.                                                                                                                                                                                            |                          |                       |                              |                            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------|------------------------------|----------------------------|
|                                                                                                                                                                                                                                                 | <u>Nentsbury.</u>        | <u>Rampgill.</u>      | <u>Rodderup.</u>             | <u>Totals.</u>             |
| Ore Mined                                                                                                                                                                                                                                       | Let to Jas. H. Harrison. | Taken over by N.F.M.D | <del>372</del><br>372 Tons   | <del>372</del><br>372 Tons |
| Ore Milled                                                                                                                                                                                                                                      |                          |                       | 447 "                        | 447 "                      |
| Pb. Concs prdcd.                                                                                                                                                                                                                                |                          |                       | 26.05 "                      | 26.05 "                    |
| % Recovery                                                                                                                                                                                                                                      |                          |                       | 5.82%                        | 5.82%                      |
| Hours worked                                                                                                                                                                                                                                    |                          |                       | 88.8 hrs                     | 88.8 hrs                   |
| Tons per hour                                                                                                                                                                                                                                   |                          |                       | 5.03 Tons                    | 5.03 Tons                  |
| <hr/>                                                                                                                                                                                                                                           |                          |                       |                              |                            |
| STOCKS.                                                                                                                                                                                                                                         |                          |                       |                              |                            |
|                                                                                                                                                                                                                                                 | <u>Nentsbury.</u>        | <u>Rodderup.</u>      | <u>Wellhope.</u>             | <u>Totals.</u>             |
| Crude Ore                                                                                                                                                                                                                                       | Nil.                     | Nil.                  | <del>2500</del><br>2500 Tons | 2500 Tons                  |
| <u>Galena</u> in stock at Rodderup, 41.538 Tons<br>(Note: All the ore has been sold but an embargo on delivery to the London area by the L.N.E.R. has held up delivery. We expect to despatch most of it in early March to London and Chester.) |                          |                       |                              |                            |
| <u>Witherite.</u>                                                                                                                                                                                                                               |                          |                       |                              | Nil.                       |
| <u>Fluor Spar.</u>                                                                                                                                                                                                                              |                          |                       |                              | Nil.                       |
| <hr/>                                                                                                                                                                                                                                           |                          |                       |                              |                            |
| Compressed Air produced at Nenthead, Nil.                                                                                                                                                                                                       |                          |                       |                              |                            |
| Compressed Air produced at Rodderup by Electrical Energy about 500 cu.ft. per minute, at 80/85 lbs pressure per sq. in. at face.                                                                                                                |                          |                       |                              |                            |
| <hr/>                                                                                                                                                                                                                                           |                          |                       |                              |                            |
| <u>Note:</u> During early February, weather conditions remained bad, and output was lower as a result. A.T.                                                                                                                                     |                          |                       |                              |                            |

## **NENTHEAD MINES FEBRUARY 1945**

NENTSBURY MINE. Main level up to Wellhope Shaft was inspected whenever possible.

MILL. Operated by Jas. H. Harrison and maintained in good condition. Rent up to end of 1944 and cost of maintenance and insurance have been paid.

RODDERUP MINE. During the early part of February, output was low owing to bad weather conditions. The quantity of ore broken was 372 tons, the quantity of concentrates produced was 26.05 Tons, and the percentage recovery was 5.82%. During the month, the percentage recovery rose from 3.85% for the week ending Feb. 10th, to 8.1% for the week ending Feb. 28th.

The improvement in the grade, was caused by rising in the roof of the Flat E. where referred to in January report and where there is about 16 ft. of Limestone above us. In rising we discovered much better ore but how far this extends it is impossible to estimate. Actually, we are depending on the ore broken daily. We have only sufficient miners to keep up a small output of ore, and all employed, both miners and labourers, are used to produce as much ore as possible. I have applied to the local Labour Exchange for miners and labourers, only to be told by the Manager of the Exchange that he has no suitable labour on his books.

It must be understood that the V.M. Co. was, and for that matter still is, regarded as a foreign Company not registered in England and consequently we had to handle the position very carefully. We were not regarded as on a first priority, as were British companies, and if we pressed the V.M. case too forcibly, we might have been treated worse than we have been.

We were qualified to be registered as a Protected Industry, but for various reasons, some financial, I did not apply for the Company to be placed under the Essential Works Order. Many, in fact most, of the mines which were controlled under the Essential Works Order, have come to grief and 90% have been closed, the plant and machinery sold, while several are advertised for sale. On the whole, we have been treated very fairly. Regarding the mine, we are working two Flats, one East from the Incline, and one West. The East forebreast and Flat combined is yielding payable ore. The Flat West is not, and during March we shall rise up to ascertain whether the good ore is above us. Around the foot of the new Incline, the strata is very much disturbed by faults and one week we may work in payable ore and in the next in low grade unpayable ore. In January report, in the second para. on Rodderup mine, I referred to the dislocation of the Strata, and the almost certain throw down of the Strata as we proceeded East.

MILL. The mill is in a good state of repair.

### SALES.

Lead Ore. During February, we despatched 23.976 Tons of bulk ore to Walkers Parker, Chester and 12.250 Tons to British Pyros White Lead Co., West Drayton. Further quantities will be despatched to both Companies early in March if the railway embargo is lifted.

Gravel. Sales during the month amounted to 224.50 Tons, mainly to the Cumberland County Council, who have placed further orders for delivery in March and April, at a price of 5s/- Per ton on site, compared with 3s/6d per ton on site pre-war.

GENERAL. I have seen Mr. MacPhail re: compensation for dumps treated by N.F.M.D. It was not possible to have another meeting with the Mineral Valuer during the month owing to his not being able to come North to see us and also because of weather conditions. Mr. MacPhail who is handling the Compensation Claim legally, hopes to arrange a meeting with him in March or early April, and will give at least three days' notice of the meeting. We are doing everything possible to get every penny we can for the Company.

I can add nothing to what I wrote on Page 3, para. 1, under "General" in January report. I was underground in Rodderup on Febry. 13th, 20th and 27th. The outlook then was better especially East, and I came to the conclusion that if the ore values continued we would not lose as much money if we continued to work the mine, including Nenthead costs, than if we put it on a maintenance basis, and this information I passed on to Mr. Hallett. I must, however, always add a proviso that the ore then in sight continues to maintain the same percentage of Galena. At the end of 1944 I valued the mine as it was then, and estimated the loss if there was no improvement in grade. The grade has improved since then, and at the end of February I estimated the loss based on the grade of ore then in sight. This must be done monthly, to give a fairly accurate statement of the mine position. I understand Mr. Hallett has applied for a subsidy to operate the mine. I am doubtful re: the results. Government controlled mines, almost without exception, have been failures and, as stated above, at least 90% have been closed with rather bad financial results. All Lead Concentrates are sold to holders of Purchasing Licences granted by the Ministry of Supply, and we are selling the highest grade ore produced in this country, and a great part of it is fetching over £19. per ton f.o.r. Alston Station, which is £5. per ton above the basic price calculated on the fixed price of £25. per ton for Lead. I sincerely hope Mr. Hallett will be successful, but if it means we get a small subsidy and are directed to sell all our ore to, say, Messrs. Walkers Parker & Co., we may be worse off.

| <u>R o d d e r u p      M i n e .</u> |    |      |       |                       |      |               |                 |
|---------------------------------------|----|------|-------|-----------------------|------|---------------|-----------------|
| <u>Development Footage: Nil.</u>      |    |      |       |                       |      |               |                 |
| <u>West Central Flats.</u>            |    |      |       |                       |      |               |                 |
| <u>J. Johnson &amp; Partners</u>      |    |      |       | 166 Days Worked.      |      |               |                 |
|                                       | L  | W    | S.F.  | S.M.                  | H    | C.F.          | C.M.            |
| Flat N.W.                             | 16 | x 19 | - 304 | - 28.24               | x 15 | - 4560        | - 129.12        |
| Heading E.                            | 52 | x 17 | - 884 | - 82.12               | x 6  | - <u>5304</u> | - <u>150.18</u> |
|                                       |    |      |       |                       |      | <u>9864</u>   | - <u>279.30</u> |
| Tons to Mill:- 372                    |    |      |       |                       |      |               |                 |
| Wages paid: £125. 14. 10.             |    |      |       | Cost per Cu.M.:- 9s/- |      |               |                 |

## 19

February 1945

[illegible]

## COMPARATIVE STATEMENT.

✠ Nentsbury ..... ✠ Rodderup ..... ✠

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|  |  |              |
|--|--|--------------|
|  |  |              |
|  |  | ... Mos. Av. |
|  |  | ... Mos. Av. |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 141          | 16/8          |
| February  |              |               | 279          | 9/-           |
| March     |              |               |              |               |
| April     |              |               |              |               |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report on the Nenthead Mines March 1945

### REPORT

on the

### NENTHEAD MINES

MARCH 1945.

|                  | <u>Nentsbury.</u>                     | <u>Rampgill.</u>                        | <u>Rodderup.</u> | <u>Totals.</u> |
|------------------|---------------------------------------|-----------------------------------------|------------------|----------------|
| Ore Mined        | Nil.                                  | Taken over                              | 462 Tons         | 462 Tons       |
| Ore Milled       | (Mine insp-<br>ected week<br>ly.)     | since 1942<br>by N.F.M.D<br>Ltd., a     | 462 "            | 462 "          |
| Pb. Cons. prdcd. | (Mill let to<br>Jas. H.<br>Harrison.) | branch of<br>the Ministry<br>of Supply. | 28.2 "           | 28.2 "         |
| % of Recovery    |                                       |                                         | 6.1%             | 6.1%           |
| Hours worked     |                                       |                                         | 94 hrs.          | 94 hrs.        |
| Tons per hour    |                                       |                                         | 4.91 Tons        | 4.91 Tons.     |

### STOCKS.

|                                       | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|---------------------------------------|-------------------|------------------|------------------|----------------|
| Crude Ore                             | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| <u>Galena</u> , in stock at Rodderup, |                   |                  | 30.176 Tons      |                |

Note: Of the 30.176 Tons in stock March 31st  
23.569 Tons was despatched to British  
Pyros White Lead Co., Ltd., during the  
first week in April. The price obtained  
is £19.375 per ton nett F.O.R. Alston.

|                     |      |
|---------------------|------|
| <u>Witherite</u> ,  | Nil. |
| <u>Fluor Spar</u> , | Nil. |

Compressor Air produced at Nenthead, Nil.

Compressed Air produced at Rodderup, by Electrical Energy, about  
500 cu.ft. per minute at 80lbs/85lbs pressure per  
square inch at face.

*H. Ince*



## **NENTHEAD MINES**

### **MARCH 1945**

NENTSBURY MINE. Main level up to Wellhope Shaft inspected and kept in order. Repairs done when necessary.

MILL. Operated by Jas. H. Harrison and maintained in good condition.

RODDERUP MINE. During March 462 Tons of ore was mined and milled for a recovery of 28.2 Tons of Pb. Concentrates. The percentage recovery was 6.1%. I very much regret having to report that the richer ore opened up in the top of the Limestone in the Flat going East, which produced payable ore for two weeks during the end of February, was slowly cut out as we went forward. For the week ended Febry. 24th, the yield from this place and the Flat West, averaged a recovery of 9.12% and for the week ended Febry. 28th, 8.1%. During these two weeks, when the weather was bad, 14.95 tons of concentrates was produced. In the Flat West, the ore broken was low grade, the yield being no more than 4 to 5%, and gradually became poorer. Our only object being to discover richer ore, we decided to drive a Cross-cut South, about 39 feet, back from the forebreast in the "E" Flat and going towards Rodderup Vein. The ore broken in the X-Cut at first was encouraging, and we continued to drive until we cut the North wall of Rodderup Vein. It was hoped that near the Vein the ore would be richer, and for several days the result was encouraging, but again, the ore gradually became poorer. Rodderup Vein throws the strata down 20 feet on the South side and as the ore broken became unpayable there was no object in driving through the Vein. The strata we knew would be thrown down, and if we drove through, the stratum on the south side would be Plate, in which very little, if any, mineral has ever been found.

I regret that at the end of March, the outlook was becoming less encouraging. I have previously stated that since War was declared, we have had to employ the small number of miners to break ore for production purposes and no development was done to enable us to prove the area in which we were working and block out payable or unpayable ore. Consequently, we have had to mine the best ore we could find from week to week. Since 1940 the only development done was by a small squad of Canadian Royal Engineers Diamond Drillers, from November 1942 to May 1943. These men were lent to us by the Government. They provided their own equipment and we had to pay their lodging allowance only and a small weekly bonus of £1 per week per man. Unfortunately, this squad was recalled for War purposes before either of the bore-holes had been driven to the depth we desired, and consequently the results were disappointing.

Before I could complete this report for March, I was requested by Mr. Hallett to prepare the estimated cost statement for care and maintenance, compared with the cost of working Rodderup Mine. I have re-read that Report, and I consider that I gave the closest detailed figures possible. The only statement I can make now is that the grade of ore in Rodderup is not as good now as it was then, and if there is no improvement in the grade, the output for April will not even reach 28 tons and possibly not 20 Tons. The position now (April 18th), is that either



the mine must be worked at a loss exceeding £3500 a year, or Rodderup must be put on a care and maintenance basis. The auditors have been here this week checking accounts, and in due course, that is by the end of this month, should prepare the Balance Sheet for 1944. I propose asking them to prepare a Balance Sheet early in May for the first four months of 1945.

MILL. In a good state of repair.

### SALES.

Lead Ore. During March, we despatched 20.175 Tons of Lead concentrates, mostly slime Lead, to Walkers Parker & Co., Chester, at a price of about £13. 4s. 0. per ton nett F.O.R. Alston, and 19.387 Tons to British Pyros White Lead Co., London, at £19.375 per ton nett F.O.R. Alston.

Gravel. sold amounted to 147 Tons, which realised £35.8 nett.

GENERAL. No further meeting took place with the Mineral Valuer in March, although he had given provisional dates of 9th, 10th and 11th April, for a meeting in Carlisle. In the meantime, I saw Mr. MacPhail, of Messrs. Blackburn Main, to discuss some points. At the end of March, the Mineral Valuer informed Mr. MacPhail that he could not visit Carlisle on either of the dates mentioned in April, and would arrange a later date for a meeting. Meanwhile, our Auditors, Messrs. Greaves & Co. had contacted a qualified Actuary and placed our case before him. The Actuary, whose report is not yet to hand, considers the Mineral Valuer has not suggested anything like a fair price per ton as compensation for the dump ore treated.

At the end of 1944 the tonnage treated, according to the figures supplied to us by N.F.M.D., was 389,345 Tons, from which about 8930.956 Tons of Concentrates averaging about 58% Zn, and 861.729 Tons of Lead concentrates averaging about 72% Pb, were produced. During the months of January, February and March, a further 59.869 Tons were treated, making a total of 449,214 Tons treated since operations began. During the three months, 1906.984 Tons of Zinc Concentrates averaging 57.62% Zn., 123.8 Tons of Lead Concentrates averaging about 71.19% Pb were produced. The Actuary has promised to send his report of the Mineral Valuer's offer, showing his (the Actuary's) method of calculation, as quickly as possible. I will send a copy to Head Office and Mr. Hallett, immediately I receive it.

| <u>R o d d e r u p     M i n e .</u> |    |      |       |                            |      |             |                              |
|--------------------------------------|----|------|-------|----------------------------|------|-------------|------------------------------|
| <u>DevelopmentFootage: Nil.</u>      |    |      |       |                            |      |             |                              |
| <u>West Central Flats.</u>           |    |      |       |                            |      |             |                              |
| <u>J. Johnson &amp; Partners.</u>    |    |      |       | 181½ days worked.          |      |             |                              |
|                                      | L  | W    | S.F.  | S.M.                       | H    | C.F.        | C.M.                         |
| East Flat                            | 20 | x 12 | - 240 | - 22.29                    | x 15 | - 3600      | - 101.93                     |
| North " (Side)                       | 9  | x 10 | - 90  | - 8.36                     | x 6  | - 540       | - 15.29                      |
| " " (X-Cut)                          | 10 | x 6  | - 60  | - 5.57                     | x 8  | - 480       | - 18.59                      |
| West "                               | 23 | x 9  | - 207 | - 19.23                    | x 10 | - 2070      | - 58.61                      |
| N.E. "                               | 6  | x 12 | - 72  | - 6.69                     | x 10 | - 720       | - 20.39                      |
|                                      |    |      |       |                            |      | <u>7410</u> | <u>- 209.81</u> @ Days Wages |
| Tonnage to Mill:- 462 Tons.          |    |      |       |                            |      |             |                              |
| Wages paid: £137. 11. 11.            |    |      |       | Price per Cu.M.:- 13s/1½d. |      |             |                              |

# MINE STATISTICS

1945.

March

|           | Tons of Ore Mined. |      |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |       | Days Worked. |         |       |           |         | Tons per Miner's Day |       | Cubic Metres per Miner's Day |       |          | Wages paid per Miner's Day |       |          | Wages paid per Underground Man |          |       | Wages paid per Cubic Metre |         | No. of Drills Working | Dynamite |      |
|-----------|--------------------|------|-------|------------------|---------|-------|----------------------|---------|-------|--------------|---------|-------|-----------|---------|----------------------|-------|------------------------------|-------|----------|----------------------------|-------|----------|--------------------------------|----------|-------|----------------------------|---------|-----------------------|----------|------|
|           | Headings.          | Day. | Total | In Ore           | In Dead | Total | In Ore               | In Dead | Total | Miners       |         |       | Labourers |         | In Ore               | Total | In Ore                       | Total | Headings | Day.                       | Total | Headings | Total                          | Headings | Total | lbs.                       | per ton |                       |          |      |
|           |                    |      |       |                  |         |       |                      |         |       | In Ore       | In Dead | Total | In Ore    | In Dead |                      |       |                              |       |          |                            |       |          |                                |          |       |                            |         |                       | Total    | Bar. |
|           |                    |      |       |                  |         |       |                      |         |       |              |         |       |           |         |                      |       |                              |       |          |                            |       |          |                                |          |       |                            |         |                       |          |      |
| Nentsbury |                    |      |       |                  |         |       |                      |         |       |              |         |       |           |         |                      |       |                              |       |          |                            |       |          |                                |          |       |                            |         |                       |          |      |
| ...Mos Ar |                    |      |       |                  |         |       |                      |         |       |              |         |       |           |         |                      |       |                              |       |          |                            |       |          |                                |          |       |                            |         |                       |          |      |
| ...Mos Ar |                    |      |       |                  |         |       |                      |         |       |              |         |       |           |         |                      |       |                              |       |          |                            |       |          |                                |          |       |                            |         |                       |          |      |
| Rodderup  | 1402               | -    | 402   | 210              | -       | 210   | 220                  | -       | 220   | 181          | -       | 181   | -         | -       | -                    | 255   | 115                          | 115   | 255      | 115                        | 152   | -        | 152                            | 151      | 151   | 511                        | 2       | 324                   | 0.70     |      |
| 2-Mos Ar  | 347                | -    | 347   | 210              | -       | 210   | 108                  | -       | 108   | 101          | -       | 101   | -         | -       | -                    | 219   | 130                          | 130   | 219      | 130                        | 151   | -        | 151                            | 117      | 117   | 611                        | 2       | 235                   | 0.66     |      |
| 3-Mos Ar  | 380                | -    | 380   | 210              | -       | 210   | 185                  | -       | 185   | 108          | -       | 108   | -         | -       | -                    | 229   | 125                          | 125   | 229      | 125                        | 151   | -        | 151                            | 121      | 121   | 617                        | 2       | 264                   | 0.69     |      |

## COMPARATIVE STATEMENT.

✱ Nentsbury ✱ Rodderup ✱

Nentsbury Tons in Dead

Rodderup Tons in Dead

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 1451         | 10/8          |
| February  |              |               | 279          | 9/-           |
| March     |              |               | 210          | 15/1.         |
| April     |              |               |              |               |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

## Report of the Nenthead Mines April 1945

### R E P O R T

\*\*\*\*\*

on the

N E N T H E A D      M I N E S

\*\*\*\*\*

\*\*\*\*\*

A P R I L    1 9 4 5.

\*\*\*\*\*

\*\*\*\*\*

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------|------------------|------------------|----------------|
| Ore mined         | Nil.              | Taken over       | 428 Tons         | 428 Tons       |
|                   | Mine              | by NFMD.         |                  |                |
| Ore Milled        | inspected         |                  | 428 "            | 428 "          |
| Pb. Concs. prdcd. | periodic-         |                  |                  |                |
|                   | ally. Mill        |                  | 14.30 "          | 14.30 "        |
| % of recovery     | let to Jas        |                  |                  |                |
|                   | H. Harrison       |                  | 3.34%            | 3.34%          |
| Hours worked      |                   |                  | 86 hrs           | 86 hrs.        |
| Tons per hour     |                   |                  | 4.97 Tons        | 4.97 Tons.     |

---

### STOCKS.

|                   | <u>Nentsbury.</u>                               | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-------------------|-------------------------------------------------|------------------|------------------|----------------|
| <u>Crude Ore.</u> | Nil.                                            | Nil.             | 2500 Tons        | 2500 Tons.     |
|                   | <u>Galena</u> in stock at Rodderup, 22.834 Tons |                  |                  |                |
|                   | <u>Witherite,</u>                               |                  | Nil.             |                |
|                   | <u>Fluor Spar,</u>                              |                  | Nil.             |                |

---

Compressed Air, produced at Nenthead, Nil.

Compressed Air, produced at Rodderup, by Electrical Energy, about 500 cu.ft. per minute at 80/85 lbs pressure per square inch, at face.

---

## **NENTHEAD MINES**

### **APRIL 1945**

NENTSBURY MINE. Main level up to Wellhope Shaft inspected and kept in order.

MILL. Operated by Messrs. Jas. H. Harrison and maintained in good condition.

RODDERUP MINE. During the month 428 tons of ore was mined and milled for a recovery of 14.30 Tons of Concentrates. Compared with March, the recovery dropped from 28.2 to 14.30 Tons, and the percentage recovered from 6.1%, to 3.34%. At the end of the month, the outlook, in the working places in the mine generally, was most discouraging.

In my Weekly Reports I have given, in as much detail as possible, the values (estimated) of the places where work was done, and in my Weekly Report for week ended April 30th, the probable loss for the month. Actually, the loss was rather less than I estimated. It must be understood that at the end of any month, the figures given are estimated - it is not possible at present to get statements from firms for weeks after the month end. Most firms are under-staffed and will be until the War with Japan ends.

MILL. In a good state of repair.

#### SALES.

Lead Ore. During April, we despatched 23.569 Tons of Lead Ore to Messrs. British Pyros White Lead Co., Ltd., West Drayton, at £19.375 per ton f.o.r Alston Station.

Gravel. During April 189 Tons of Cuttings and Gravel were sold at the usual prices per ton on site, viz: 5s/- for Cuttings and 3/6d for Sand.

GENERAL. During the month, no meeting with the Mineral Valuer was arranged to consider the question of compensation for the dump material treated by N.F.M.D. Ltd. The draft report from the Actuary came to hand and was considered by Messrs. Blackburn & Main, with whom I had an interview. We decided to suggest minor alterations and additions, and returned it to the Actuary for his further consideration. The Actuary would then prepare a final report and a copy would be sent to the Mineral Valuer, previous to arranging a meeting of all parties concerned.

We have done our utmost to bring this matter to a reasonable and just conclusion. Immediately a final report is submitted by the Actuary, a copy will be sent to Head Office through Mr. Hallett.

We shall accept no offer without submitting it to the General Manager. The tonnage of dump material treated by N.F.M.D. this year to the end of April, was 80261 Tons, making a total of 469966 Tons since operations commenced in July 1943.

R o d d e r u p   M i n e

Development Footage: Nil.

West Central Flats.

J. Johnson & Partners.

158½ Days worked.

|           | L       | W | S.F. | S.M.    | H    | C.F.   | C.M.    |
|-----------|---------|---|------|---------|------|--------|---------|
| East Flat | 10 x 15 | - | 150  | - 13.93 | x 11 | - 1650 | - 46.72 |
| " Canch   | 10 x 4  | - | 40   | - 3.72  | x 4  | - 160  | - 4.53  |
| N.E. Flat | 18 x 12 | - | 216  | - 20.07 | x 8  | - 1728 | - 48.93 |
| S. X-Cut  | 16 x 10 | - | 160  | - 14.86 | x 8  | - 1280 | - 36.24 |
| S. Side   | 12 x 6  | - | 72   | - 6.69  | x 8  | - 576  | - 16.31 |

5394 - 152.73 @ Days Wages

Tonnage to Mill:- 428.

Wages Paid:- £119: 4s: -.

Cost per Cu.M.:- 15s/8d.

| MINE STATISTICS    |   |     |     |                  |     |     |     |                      |     |     |   |              |   |   |     |                      |     |      |      | 1945                         |      |      |      |                            |      |      |   |                                |      |      |      |                            |      |      |      |                           |      |                       |      |          |      |      |      |         |      |      |      |         |      |      |      |       |      |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|--------------------|---|-----|-----|------------------|-----|-----|-----|----------------------|-----|-----|---|--------------|---|---|-----|----------------------|-----|------|------|------------------------------|------|------|------|----------------------------|------|------|---|--------------------------------|------|------|------|----------------------------|------|------|------|---------------------------|------|-----------------------|------|----------|------|------|------|---------|------|------|------|---------|------|------|------|-------|------|---------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Tons of Ore Mined. |   |     |     | Cubic Metres Cut |     |     |     | Tons per Cubic Metre |     |     |   | Days Worked. |   |   |     | Tons per Miner's Day |     |      |      | Cubic Metres per Miner's Day |      |      |      | Wages paid per Miner's Day |      |      |   | Wages paid per Underground Man |      |      |      | Wages paid per Cubic Metre |      |      |      | Wages paid per ton of Ore |      | No. of Drills Working |      | Dynamite |      |      |      |         |      |      |      |         |      |      |      |       |      |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Headings.          |   |     |     | In Ore           |     |     |     | In Dead              |     |     |   | Total        |   |   |     | In Ore               |     |      |      | In Dead                      |      |      |      | Total                      |      |      |   | In Ore                         |      |      |      | In Dead                    |      |      |      | Total                     |      |                       |      | In Ore   |      |      |      | In Dead |      |      |      | Total   |      |      |      | lbs.  |      | per ton |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Dev.               |   |     |     | Total            |     |     |     | In Ore               |     |     |   | In Dead      |   |   |     | Total                |     |      |      | In Ore                       |      |      |      | In Dead                    |      |      |   | Total                          |      |      |      | In Ore                     |      |      |      | In Dead                   |      |                       |      | Total    |      |      |      | In Ore  |      |      |      | In Dead |      |      |      | Total |      |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Nentsbury          |   |     |     |                  |     |     |     |                      |     |     |   |              |   |   |     |                      |     |      |      |                              |      |      |      |                            |      |      |   |                                |      |      |      |                            |      |      |      |                           |      |                       |      |          |      |      |      |         |      |      |      |         |      |      |      |       |      |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Rodderup           |   |     |     |                  |     |     |     |                      |     |     |   |              |   |   |     |                      |     |      |      |                              |      |      |      |                            |      |      |   |                                |      |      |      |                            |      |      |      |                           |      |                       |      |          |      |      |      |         |      |      |      |         |      |      |      |       |      |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 2 Mos. Av.         |   |     |     |                  |     |     |     |                      |     |     |   |              |   |   |     |                      |     |      |      |                              |      |      |      |                            |      |      |   |                                |      |      |      |                            |      |      |      |                           |      |                       |      |          |      |      |      |         |      |      |      |         |      |      |      |       |      |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 4 Mos. Av.         |   |     |     |                  |     |     |     |                      |     |     |   |              |   |   |     |                      |     |      |      |                              |      |      |      |                            |      |      |   |                                |      |      |      |                            |      |      |      |                           |      |                       |      |          |      |      |      |         |      |      |      |         |      |      |      |       |      |         |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 428                | - | 428 | 153 | -                | 153 | 280 | 280 | -                    | 280 | 153 | - | 153          | - | - | 153 | 270                  | 270 | 0.90 | 0.90 | 2.70                         | 2.70 | 0.90 | 0.90 | 0.90                       | 0.90 | 15/1 | - | 15/1                           | 15/1 | 15/1 | 15/1 | 15/1                       | 15/1 | 15/1 | 15/1 | 15/1                      | 15/1 | 15/1                  | 15/1 | 15/1     | 15/1 | 15/1 | 15/1 | 15/1    | 15/1 | 15/1 | 15/1 | 15/1    | 15/1 | 15/1 | 15/1 | 15/1  | 15/1 | 15/1    | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 | 15/1 |

## Report on the Nenthead Mines May 1945

REPORT  
 on the  
 NENTHEAD MINES  
 MAY 1945

|                   | <u>Nentsbury.</u>                | <u>Rampgill.</u>    | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|----------------------------------|---------------------|------------------|----------------|
| Ore Mined         | Nil.                             | Taken               | 174 Tons         | 174 Tons       |
| Ore Milled        | Mill<br>let to J.<br>H. Harrison | over by<br>N.F.M.D. | 159 "            | 159 "          |
| Pb. Concs. Prdcd. |                                  |                     | 8.60 "           | 8.60 "         |
| % of Recovery     |                                  |                     | 5.40%            | 5.40%          |
| Hours Worked      |                                  |                     | 33 hrs           | 33 hrs         |
| Tons per hour     |                                  |                     | 4.82 Tons        | 4.82 Tons      |
| Tons in stock     |                                  |                     | 15 Tons          | 15 Tons.       |

Note: The Pb. Concentrates produced, and the % of Recovery, includes the concentrates produced from treating the slime cleaned from the slime pits.

### STOCKS.

|                                       | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|---------------------------------------|-------------------|------------------|------------------|----------------|
| <u>Crude Ore</u>                      | Nil               | 15 Tons          | 2500 Tons        | 2515 Tons      |
| <u>Galena</u> , in stock at Rodderup, |                   |                  |                  | 28.884 Tons    |
| <u>Witherite</u> ,                    |                   |                  | Nil.             |                |
| <u>Fluor Spar</u> ,                   |                   |                  | Nil.             |                |

Compressed Air, produced at Nenthead, Nil.

Compressed Air, produced at Rodderup by Electrical Energy, about 500 cubic feet per minute at 80/85 lbs pressure at the face.

## NENTHEAD MINES MAY 1945

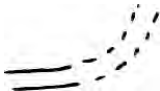
NENTSBURY MINE. Main level up to Wellhope Shaft inspected and kept in order.

MILL. Operated by Jas. H. Harrison and maintained in good condition.

RODDERUP MINE. During the month, 174 tons of ore were mined and 159 tons crushed. Concentrates produced amounted to 8.60 Tons.

During May, instructions were received from Head Office, per Mr. Hallett, that production was to stop and that as many miners as were worth employing should only be employed, on development work only. These instructions were put into effect immediately, by giving one week's notice to the Mill employees to terminate their employment on May 16th. During the previous week ending May 12th, the Government issued instructions that May 8th and 9th were to be National holidays for all employees in the United Kingdom, and all employers had to pay their employees their wages for these days, which were holidays to celebrate the unconditional surrender of Germany. Notices were posted on May 11th, terminating the employment of all Mill-men on the 18th, and separate notices were handed to three miners and labourers underground and to two surface labourers, a total of 10 men altogether ceasing their employment. Incidentally I must report that the Mill-men, mostly aged men, were not willing to work in the mine, and I had no authority to direct them to do so. During the week ending May 18th, the Mill and Mill-men were employed cleaning the Slime-pits, and dressing the slime in the slime-plant, and Crushing and dressing the few tons of mine ore that were payable. The Mill foreman was among the employees whose employment ceased on May 18th.

Work in the mine continued, and a tracing from the mine plan is attached, showing where drifts have been continued. I regret to have to state the grade of ore broken has fallen off considerably, and on May 31st each place worked was very poor. Only a small percentage could be picked as suitable for milling, and what was picked would not meet the cost of milling and mining. The drifts were set out to go in a N.E. direction in virgin ground and North of Rodderup Vein, which is more or less under the Blackburn Level. By continuing near the Vein there was the possibility of the level above collapsing. The Vein was worked in places years ago up to a few feet below the level, and some of the places so worked have been filled with deads.

No.2 Forebreast, shown on the tracing, will be  diverted North as indicated by the dotted line, thus to go out into ground which has never been prospected by the V.M. Co., but I considered it should be diverted North to prove a wider area. It must be taken into consideration that there are no veins in this area, except cross-fissures, which, further West and during 1940/43, yielded payable ore in the Flats. It is to prove whether payable ore has been deposited in Flat deposits, that this forebreast is being diverted North. The following tables will show the quantities of ore mined, and the concentrates produced, during 1940/44, viz: -



|                |                    |                       |                     |
|----------------|--------------------|-----------------------|---------------------|
| 1940 ore mined | 8,614 Tons         | Concentrates produced | 903.15 Tons         |
| 1941 " "       | 9,728 "            | " "                   | 1010.69 Tons        |
| 1942 " "       | 5,380 "            | " "                   | 479.65 Tons         |
| 1943 " "       | 4,853 "            | " "                   | 448.20 Tons         |
| 1944 " "       | <u>4,729</u> "     | " "                   | <u>446.78</u> Tons  |
| Totals         | <u>33,304</u> Tons |                       | <u>3288.47</u> Tons |

Average percentage of recovery: - 9.874%

It will be noticed that in 1942, both the tonnage of ore and concentrates, commenced to fall off, and with a less supply of labour, which was comparatively inefficient, we could not keep up the output when we had to transport the ore a rather considerable distance, when work was stopped in the West End Flats, the grade of the ore had dropped. Had we possessed a full supply of competent miners during the War years, the mines would have met all costs including development which had to be curtailed to maintain revenue. On May 25th 1945 when in the mine, I went down a Winze, shown on the tracing enclosed, into what is accessible of the old workings, and proceeded W. as far as the arrow indicates. In places there was mineral showing, more than in the area where we are now working, and the prospects were more encouraging. The depth of the winze below the main is about 20 feet. I did not see any payable ore in sight, but it is possible, and even probable, that development might open up payable ore. The difficulty at present is that the incline, which, in 1943 connected the workings with the main level, collapsed, and it will no longer be possible to extract the ore by the old road. Development could be carried on for months and the payable ore picked out and stored underground. There is also room to store the "deads" in the old workings. If a sufficient quantity of payable ore was found a survey would have to be made and a new Incline put up from the workings to the main level. It would take 4 men about three months to do this work. I have been expecting Mons. Chaplain to visit Nenthead, and have not changed any plans until he has seen where we are working and the Western area about which I am writing. The outlook where work is now proceeding is most discouraging, but, driving into virgin ground, an improvement may happen at any time.

MILL. Rodderup Mill is left in good working condition.

#### SALES.

Lead Ore. 2.10 Tons were sold to Messrs. Morris Ashby Ltd., for £23.17. 6. per ton F.O.R. Alston. We have orders for more Lead Ore to be sold in June.

Gravel. During the month 187.50 Tons of Gravel (Cuttings) was sold at the usual prices of 5s/- per ton for Gravel and 3s/6d per ton for Sand, both prices on site. Further orders for Gravel and Stone have been received for June.

GENERAL. We have not yet received the statement from N.F.M.D. Ltd., of the quantity of dump ore treated during May. In my April Report, I gave the tonnage treated up to the end of April 1945 since operations commenced in 1943, as amounting to 469,966 tons.

Re: Compensation. During May, a report prepared by Mr. H. Boag, a fully qualified actuary, and dealing with the Co.'s claim for compensation, was submitted to our Solicitors Messrs. Blackburn & Main, and copies sent to the Mineral Valuer, for the Government, to Mr. Hallett with a request that he should send it immediately to Head Office for the General Manager. I saw Mr. MacPhail of Messrs, Blackburn & Main, as late as June 1st, and he informed me he had sent a copy of the report to the Mineral Valuer and asked him to suggest a date when he could meet us, preferably in Carlisle when the Actuary, the Solicitor and myself could be present, to discuss the matter and try to arrive at a decision so far as we are concerned. Any offer will be cabled at once to the General Manager for his approval before acceptance. The interminable delays after scores of meetings, have both wearied the Solicitor and myself, but we have held out for what we considered was the Company's right.

Once the dumps question is settled, the question of rent for Rampgill Mill Building must be raised, and finally the question of damages to the building and the machinery which was in the building 'when the Government requisitioned it. I hope the meeting with the Mineral Valuer can be held soon. The

Mineral Valuers offer was based on a Present Value which he calculated at £4770, which compares with the Actuary's calculations of the amount of compensation due, under different circumstances, of from £10,734 to £15,450, the value of the Slime dumps and the question of Royalty being disregarded in both cases and will form part of a further agreement. Personally, I consider that if the Government, through the Non-Ferrous Minerals Development Control, or the Ministry of Production, another Government control, get off by paying even what the Actuary has valued as the amount of compensation due, they will get off very lightly. I do not know what more could have been than has been done.

Staff. In addition to the 10 men who terminated their employment at Rodderup on May 18th, Mr. William Rutherford, who had been employed for very many years as a Mill Foreman and, since the outbreak of war, as a Clerk in the Office, retired at the end of the month of May, at the age of 75 years. I wish to place on record my appreciation of Mr. Rutherford's services to the V.M. Co. Since I became Manager of the mines at Nenthead on Dec. 23rd 1923, I have regarded Mr. Rutherford as a most capable servant in every department he occupied. Mr. Rutherford must have served the Company for about 30 years, and, in a letter to him, I have expressed the best wishes of the Company and myself that he would enjoy good health and happiness in his retirement.

R o d d e r u p   M i n e .

West Central Flats.

Jos. Johnston & Partners.

157 Days Worked.

|              | L  | W    | S.F.  | S.M.    | H    | C.F.   | C.M.    |
|--------------|----|------|-------|---------|------|--------|---------|
| E. Flat      | 3  | x 15 | - 45  | - 4.18  | x 11 | - 495  | - 14.02 |
| E. Canch     | 6  | x 4  | - 24  | - 2.23  | x 4  | - 96   | - 2.72  |
| N.E. Flat 1. | 9  | x 14 | - 126 | - 11.70 | x 8  | - 1008 | - 28.54 |
| " " " 2.     | 4  | x 12 | - 48  | - 4.46  | x 8  | - 384  | - 10.87 |
| " " Drift 1. | 33 | x 6  | - 198 | - 18.39 | x 8  | - 1584 | - 44.85 |
| " " " 2.     | 32 | x 6  | - 192 | - 17.84 | x 8  | - 1536 | - 43.49 |
| Rise N.      | 9  | x 6  | - 54  | - 5.02  | x 8  | - 432  | - 12.23 |
| W. Drift.    | 4  | x 6  | - 24  | - 2.23  | x 8  | - 192  | - 5.44  |

5727 - 162.16 @ Days Wages

Tonnage to Mill:- 174.

Wages Paid: £122: 9:11.

Cost per Cu.M.:- 15s/1½d

# MINE STATISTICS

1945.

May

|            | Tons of Ore Mined. |            | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked. |          |       |           |          |       | Tons per Miner's Day |       |        | Cubic Metres per Miner's Day |        |       | Per Underground Man |              |          | Wages paid per Miner's Day |       |          | Wages paid per Underground Man |          |       | Wages paid per Cubic Metre |         | No. of Drills Working |          | Dynamite |  |
|------------|--------------------|------------|------------------|----------|-------|----------------------|----------|-------|--------------|----------|-------|-----------|----------|-------|----------------------|-------|--------|------------------------------|--------|-------|---------------------|--------------|----------|----------------------------|-------|----------|--------------------------------|----------|-------|----------------------------|---------|-----------------------|----------|----------|--|
|            | Headings.          | Dev. Total | In Ore           | In Deads | Total | In Ore               | In Deads | Total | Miners       |          |       | Labourers |          |       | In Ore               | Total | In Ore | Total                        | In Ore | Total | Tons                | Cubic Metres | Headings | Dev.                       | Total | Headings | Total                          | Headings | Total | lbs.                       | per ton |                       |          |          |  |
|            |                    |            |                  |          |       |                      |          |       | In Ore       | In Deads | Total | In Ore    | In Deads | Total |                      |       |        |                              |        |       |                     |              |          |                            |       |          |                                |          |       |                            |         | In Ore                | In Deads | Total    |  |
| Nentsbury  |                    |            |                  |          |       |                      |          |       |              |          |       |           |          |       |                      |       |        |                              |        |       |                     |              |          |                            |       |          |                                |          |       |                            |         |                       |          |          |  |
| ...Mos Av  |                    |            |                  |          |       |                      |          |       |              |          |       |           |          |       |                      |       |        |                              |        |       |                     |              |          |                            |       |          |                                |          |       |                            |         |                       |          |          |  |
| ...Mos Av  |                    |            |                  |          |       |                      |          |       |              |          |       |           |          |       |                      |       |        |                              |        |       |                     |              |          |                            |       |          |                                |          |       |                            |         |                       |          |          |  |
| Rodderup   | 174                | -          | 174              | 102      | -     | 102                  | 107      | -     | 107          | 157      | -     | 157       | -        | 157   | -                    | 157   | 111    | 103                          | 103    | 111   | 103                 | 153          | 153      | 153                        | 151   | 141      | 3                              | 110      | 235   |                            |         |                       |          |          |  |
| ...Mos Av  | 340                | -          | 340              | 190      | -     | 190                  | 239      | -     | 239          | 100      | -     | 100       | -        | 100   | -                    | 100   | 239    | 110                          | 110    | 239   | 239                 | 151          | 151      | 151                        | 129   | 129      | 14                             | 2        | 201   | 0102                       |         |                       |          |          |  |
| 5...Mos Av | 352                | -          | 352              | 189      | -     | 189                  | 180      | -     | 180          | 104      | -     | 104       | -        | 104   | -                    | 104   | 214    | 115                          | 115    | 214   | 214                 | 152          | 152      | 152                        | 132   | 71       | 2                              | 293      | 083   |                            |         |                       |          |          |  |

## COMPARATIVE STATEMENT.

✱..... Nentsbury .....✱ Rodderup .....✱

Nentsbury ..... Tons in Deads ....

Rodderup ..... Tons in Deads ....

Wages paid per Cubic Metre in Headings as suggested by your letter of 2nd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 141          | 16/8          |
| February  |              |               | 279          | 9/-           |
| March     |              |               | 210          | 13/1.         |
| April     |              |               | 153          | 15/8          |
| May       |              |               | 102          | 15/1.         |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report on the Nenthead Mines June 1945

### REPORT ON THE NENTHEAD MINES JUNE 1945.

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u>           | <u>Rodderup.</u> | <u>Totals</u> |
|------------------|-------------------|----------------------------|------------------|---------------|
| Ore Mined        | Nil.              | Taken over<br>by NFMD Ltd. | 45 Tons          | 45 Tons       |
| Ore Milled       | Nil.              |                            | 45 "             | 45 "          |
| Pb. Concs. prcd. | Nil.              |                            | 1.35 "           | 1.35 "        |
| % of Recovery    | Nil.              |                            | 3.00%            | 3.00%         |
| Hours worked     | Nil.              |                            | 9 hrs.           | 9 hrs         |
| Tons per hour    | Nil.              |                            | 5 Tons           | 5 Tons        |
| Tons in stock    | Nil.              |                            | 15 "             | 15 "          |

#### STOCKS.

|           | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------|-------------------|------------------|------------------|----------------|
| Ordue Ore | Nil.              | 15 Tons          | 2500 Tons        | 2515 Tons.     |

Galena, in stock at Rodderup ~~30.234~~ 30.234 Tons

Note: All the 30.234 Tons have been sold to M.Ashby Ltd., British Pyros White Lead Co., Walkers Parker & Co. and is only awaiting despatch. That sold to Ashby was actually sold before the price of Lead was raised to £30. per ton. We shall therefore be paid £23. 17s. 6d. nett per ton from Ashby, £24. 7. 6. per ton nett from Pyros, and W.Parker will pay on the agreed percentage of Lead content as per their analysis and xours, on a basis of £30. per ton.

Witherite in stock Nil.

Fluor Spar Nil.

Compressed Air, produced at Nenthead, Nil.

Compressed Air, produced at Rodderup, by Electrical Energy, about 500 cu. ft. per minute at 80/85 lbs per sq. in. pressure at the face.

## **NENTHEAD MINES**

### **JUNE 1945**

NENTSBURY MINE. Main level up to Wellhope Shaft inspected and repaired in places. Owing to shortage of labour, we are unable to inspect the level weekly.

MILL. Operated by Jas. H. Harrison and maintained in a good condition. One half years rent, 1<sup>st</sup> Jan. 1945 to 30<sup>th</sup> June 1945, £250 is now due for payment. Note: N.F.M.D. Ltd., also owe the Company £187. 10. 0. In respect of Water Rent for the same period.

RODDERUP MINE. My Weekly Reports, if you have received them, will give you full particulars of each of the three drifts (forebreasts) which we have been driving. At the end of June, the values in each drift were negligible. About the middle of June, the top half of No.1 carried mineral and we were able to pick out some ore, which, although unpayable if all costs are considered, was too high in Lead content to store as "deads". We therefore sent it to the Mill, as we were finding it difficult to store all the deads as well as any low grade ore in the mine and dumping it outside would have meant double handling costs. I decide to mill it as the actual cost of milling alone would more than be met by the value of the Concentrates recovered. By taking two labourers from the mine, and employing the Mill foreman and two other men for odd days, we were able to mill the ore without holding up the continuation of the drives in the mine. Further, we had to fill lead ore into 600 drums for Morris Ashby Ltd., and when all the ore had been crushed and there was time to spare, these men dried the ore and filled and weighed the drums for export. This explanation will indicate why we milled the ore. The matter was purely an economic one.

The drives underground are set out parallel to Rodderup Vein, in a North Easterly direction. The reason for exploring, this area is that I consider if we get too far away from the vein we are not as likely to find mineral as if we keep nearer to the vein, and by going in a North Easterly direction we are slowly going in a direction away from the main level and are not as likely to weaken the level above.

The area in which we are working is disturbed by a series of small cross veins which have thrown the Limestone stratum sometimes up, and sometimes down, and contrary to what has occurred in other parts of the mine, where small cross veins have enriched the mineral deposition for several months, the cross veins emanating from the Rodderup Vein have impoverished the mineral deposition. From the Bore-holes put out in 1942/43 by the Canadian Drillers, we calculated the strata was disturbed, but later when working in late 1943 early 1944, and some distance West of where we are now working, the mineral deposition improved considerably, the only change with the Western area was that whereas payable mineral was found in the top of the Limestone West, it was found in the bottom East. Consequently, when we put the new Incline down from the Blackburn level, we drove it down to the bottom of the "Grey Bed" and for two or three months found payable ore. Pillars had to be left to support the

roof of the Blackburn Level in these parts and good ore can still be seen in the pillars.

I am both disappointed and discouraged by not finding payable ore where we are now working, and although I can see no immediate prospect of improvement, I do not consider that there is no payable ore in this area. When computing the tonnage in a marked rectangular area, at the end of 1937 we considered we had upwards of 100,000 tons of ore of an average grade of 6% to 6.5%. During 1938, we mined and milled 22993 tons of an average value recovered of 6.46%. For 1939, we mined and crushed 3305 tons for an average recovery of 11.05%. The average recovery for the years 1938/39 was 6.95% and for the five years 1940/44 inclusive, 9.874%.

During 1938, 22993 Tons of ore were crushed, and in 1939, 3305 Tons totalling 26298 Tons, from which 1830.64 Tons of Concentrates were produced. During the five years 1940/44 inclusive, tonnage mined amounted to 33304 Tons, which with the 26298 Tons for 1938/39, gives a total of 59602 Tons. From 59602 Tons of ore, 5119.11 Tons of Concentrates were produced. The recovery from 1938 to 1944 inclusive equals 8.58% or approx. 2% above the estimated value. Over 50% of what was estimated as available tonnage, has been mined. Of the tonnage mined almost 90% has been mined from the Flats in the Tyne Bottom Limestone, North of Rodderup Vein. The Plan will show the small percentage mined South of the Vein. Since 1938 no work has been done South of the Vein. In 1939, we worked what rich ore we could find to keep the loss as low as possible. From the date war was declared we tried to keep on doing so because of rising costs and because of insufficient and inefficient labour supply, and also to find sufficient money to keep the mines operating and from falling into the general control of the Government, which, up to date, has not treated the Company with proper consideration. Now we cannot get down to work either North or South of Rodderup Vein, West of where we are working. Neither are we getting any advantage of the water supply from the Hydro because the Middle Level is blocked. This Level is choked and has been for some time. We have not sufficient labour to develop underground and also do this extra work. For five years' development had to be neglected, in order to carry on and pay our way. Developing Rodderup mine will mean time and money, the former depending upon the labour supply. At present, there is no immediate prospect of an increase in the supply of labour, but with the release of men from Europe, it is probable the labour supply will be increased by the end of the year. It is very difficult to know what action to take under existing conditions and consequently I am looking forward with interest to discussing the whole situation with Mons. Chaplain, and I hope he will soon be able to visit England.

MILL. In good working order.

SALES.

Lead Ore. None sold during June.

Gravel. 40.25 Tons were sold. We have very little washed and screened gravel in stock.

GENERAL. Nentsbury Mine. As you are aware from 1924 to 1929 inclusive, we opened mined and crushed 124960 tons of ore and produced therefrom 17796.6 Tons of Lead Concentrates, the percentage recovery being 14.4%, and 2610.7 Tons of Zinc Concentrates, the zinc percentage recovery being 2.097%. The lead Concentrates on average were well over 80% Pb, and the Zinc Concentrates were from 30 to 35% Zn. All this ore was mined from several veins in the area around Wellhope Shaft. It is the opinion of geologists who have inspected and considered the origin of such Lead Ore found in this area, that the source of the deposits found in the Great Limestone originated below, and they consider it a good speculative prospect to put bore-holes down to the area below where the ore was rich in the Limestone. We had hoped to do this before the Canadian drillers left, but they were recalled by the Government before Completing the drilling programme at Rodderup Mine and consequently the scheme fell through. Actually, Wellhope Shaft was sunk 20 feet below the drainage level but no X-Cuts were driven from the bottom to any Vein in the vicinity. Geologists consider there is a good prospect of payable ore being found in the Quarry Hazle, a hard stratum the top of which is 16 feet to 25 feet below the drainage level. I am referring to this proposal only to place before the Company a prospect which might be worth considering should the Co. be considering abandoning Nentsbury Mine.

N.F.M.D. etc. Payment for water used by N.F.M.D. Ltd., up to June 30<sup>th</sup> 1945, and amounting to £187. 10. 0. has now been received. The quantity of dump ore treated by this firm up to June 30<sup>th</sup> 1945 is 510,772 Tons. For the first six months of 1945 N.F.M.D. treated 121,427 Tons and produced therefrom 3688.848' Tons of Zinc Concentrates assaying approx. 57.71% Zn, and 245.18 Tons of Lead Concentrates assaying about 74.1% Lead.

Meetings have been held in Carlisle with Messrs. Blackburn & Main re: Compensation for the Dumps, and in Newcastle with Messrs. Greaves & Co., the Auditors, re: Balance Sheet and alterations suggested by Head Office if Messrs. Greaves & Co. approved. Replies respecting all queries have been sent to Mr. Hallett in London, through whom we have received all the requests re: these matters. Messrs Blackburn & Main and I have done all in our power to hurry the decision of the Government re: Compensation of Dumps, with the Mineral Valuer. The delay been caused by the Government Valuers who seem to be frequently on holiday and. also by the difficulty in arranging dates to suit all parties. Finally, we have arranged a meeting with the Mineral Valuer in Carlisle for July 11<sup>th</sup>. Mr. Boag, the actuary, cannot attend unless there is an alteration in his appointments. Mr. MacPhail, of Messrs. Blackburn & Main, and Mr. Hutchinson, of Messrs, Greaves & Co., and myself, will meet the Valuer and see what arrangement we can come to on the basis of Mr. Boag's report. If the Mineral Valuer's offer is still low, we shall probably have to arrange another meeting when Mr Boag can attend.



Rodderup Fell Mine.

West Central Flats.

J. Johnson & Partners.

114 Days Worked.

Drifts.

|         | L      | W | S.F. | S.M. | H.        | C.F. | C.M.         |
|---------|--------|---|------|------|-----------|------|--------------|
| No.1 N. | 31 x 7 | - | 217  | -    | 20.16 x 8 | -    | 1736 - 49.16 |
| No.2 N. | 22 x 7 | - | 154  | -    | 14.31 x 8 | -    | 1232 - 34.88 |
| No.3 W. | 17 x 6 | - | 102  | -    | 9.47 x 8  | -    | 816 - 23.10  |

3784 - 107.14 @ Days Wages.

Tonnage to Mill:- 45

Wages Paid:- £86. 16. 7.

Cost per Cu.M. :-16s/2d.

(Not including Holiday Pay).

---

# MINE STATISTICS

June 1945

|  | Tons of Ore Mined. |      |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |       | Days Worked. |         |       |           |         |       | Tons per Miner's Day |       |        | Cubic Metres per Miner's Day |        |       | Per Underground Man |       |          | Wages paid per Miner's Day |       |          | Wages paid per Underground Man |          |       | Wages paid per Cubic Metre |         |      | No. of Drills Working |    | Dynamite |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|--|--------------------|------|-------|------------------|---------|-------|----------------------|---------|-------|--------------|---------|-------|-----------|---------|-------|----------------------|-------|--------|------------------------------|--------|-------|---------------------|-------|----------|----------------------------|-------|----------|--------------------------------|----------|-------|----------------------------|---------|------|-----------------------|----|----------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|  | Headings.          | Dev. | Total | In Ore           | In Dead | Total | In Ore               | In Dead | Total | Miners       |         |       | Labourers |         |       | In Ore               | Total | In Ore | Total                        | In Ore | Total | In Ore              | Total | Headings | Dev.                       | Total | Headings | Total                          | Headings | Total | lbs.                       | per ton |      |                       |    |          |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|  |                    |      |       |                  |         |       |                      |         |       | In Ore       | In Dead | Total | In Ore    | In Dead | Total |                      |       |        |                              |        |       |                     |       |          |                            |       |          |                                |          |       |                            |         | Bar- | In                    | In | In       | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In | In |

## COMPARATIVE STATEMENT.

\*..... Nentsbury .....\* Rodderup .....\*

Nentsbury ..... Tons in Dead .....  
Rodderup ..... Tons in Dead .....

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

Note: Calculations marked \* include the Holiday payment made in June in respect of full payment of one week's wages to each miner on holiday as per Agreement with the Government. These results will gradually average out by the end of the year.

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 141          | 10/8          |              |               |
| February  | 279          | 9/-           |              |               |
| March     | 210          | 13/1          |              |               |
| April     | 153          | 15/8          |              |               |
| May       | 102          | 15/1          |              |               |
| June      | 107          | 21/3          |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report on Nenthead Mines July 1945

REPORT ON THE  
NENTHEAD MINES  
JULY 1945.

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u>          | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------|---------------------------|------------------|----------------|
| Ore Mined         | Nil.              | Taken over<br>by N.F.M.D. | Nil.             | Nil.           |
| Ore Milled        | "                 |                           | "                | "              |
| Pb. Concs. Prdcd. | "                 |                           | "                | "              |
| % of Recovery     | "                 |                           | "                | "              |
| Hours worked      | "                 |                           | "                | "              |
| Tons per hour     | "                 |                           | "                | "              |
| Tons in stock     | "                 |                           | 15 Tons          | 15 Tons.       |

### STOCKS.

|           | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------|-------------------|------------------|------------------|----------------|
| Crude Ore | Nil.              | 15 Tons          | 2500 Tons        | 2515 Tons      |

Galena in stock at Rodderup, 30.234 Tons

Note: All the stock (30.234 Tons) as reported last month, has been sold, but owing to the larger size ore sold to Morris Ashby Ltd., having crumbled to a finer size in the heap, we were unable to despatch the quantity of 3/15 mm. we put in the heap, and the ore had to be screened again. Messrs. Morris Ashby Ltd. having arranged to despatch the original quantity in the heap, had to consult their clients about the possibility of accepting smaller size material, and this has meant cabling to India. Until a reply is received from India, we are held up, as if ~~the~~ Morris Ashby Ltd. cannot accept the smaller size ore, we can sell it to either British Pyros White Lead Co. Ltd., or Messrs. Walkers Parker & Co. Ltd., for both of whom we have parcels to be despatched. Morris Ashby Ltd. having been good customers in the past, we have given them the opportunity of either accepting or refusing the finer size.

Witherite in stock, Nil.

Fluor Spar " " Nil.

Compressed Air produced at Nenthead, Nil.

Compressed Air produced at Rodderup, by Electrical Energy, about 500 cu. ft. per minute at 80lbs per sq. inch pressure at working face.

## **NENTHEAD MINES JULY 1945**

NENTSBURY MINE. Main level up to Wellhope Shaft inspected and repaired whenever possible.

MILL. Operated by Jas. H. Harrison and maintained in good order. (Note: N.F.M.D. Ltd. Have paid the Water Rent of £187. 10. 0. Due to June 30<sup>th</sup> 1945. Messrs. Harrison owe one quarter's rent from 1<sup>st</sup> April 1945 to June 30<sup>th</sup> 1945)

RODDERUP MINE. The Weekly Reports will, if received by you, have given you details of the work done weekly and the values in each working place. During July, we produced no ore worth sending to the Mill, and whet ore worth milling was filled in wagons and left in the mine until such time as we had sufficient to run the Mill for one day. As reported last month, we are Working in a disturbed area with a series of Cross Faults (or small veins) crossing approximately "N" by "S" from Rodderup Vein, which vein is known as an "E.N.E. by W.S.W." vein.

The development in each of the three drifts has yielded disappointing results, and caused us great anxiety. I contemplated suspending work next month in the "W" drift if there is no improvement and employing the miners from the "W" Drift to drive a forebreast "N" some 60 feet "E." of the "W." Drift, in what is an unexplored area.

It is a problem to know what to do for the best with the few miners employed, and the slow progress made by such few miners, who are not very efficient, is irritating. I can add nothing more to what was stated in the June report, viz: that although at the end of July no immediate prospect of an improvement in any working was visible, I do not consider that if work is continued in the area no payable mineral will be found. Early in August I have arranged for Dr. K. C. Dunham, a Government Geologist who knows Rodderup Mine, the geology of the district as well as anybody in this country, to consider the possibilities and probabilities with me. Dr. Dunham will not visit the mine officially, and there will be no expense incurred by the V.M. Co. He is interested in the district, having known it for many years, and holds degrees of "Doctor of Philosophy, Bachelor of Science and Fellow of the Geological Society of Great Britain, Master of Science of Harvard University, and on May 17th this year was awarded the Gold Medal by the Institution of Mining and Metallurgy for his paper on the production of Galena and associated minerals in the Northern Pennines. I will send you Dr. Dunham's opinion after he has visited Rodderup Fell.

I am still looking forward to Mr. Chaplain visiting Nenthead, when the question of Rodderup and Nentsbury mines can be discussed in detail.

MILL. In good working order.

### SALES.

Lead Ore. None sold during July.

Gravel & Stones. 113.50 Tons sold. The prices per ton on site were 5s/- Per ton for gravel, and 2s/- per ton for stone.

GENERAL. N.F.M.D. For the first six months of 1945

N.F.M.D. Ltd. treated 121,427 Tons of dump material, and produced 3688.848 Tons of Zinc Concentrates assaying approximately 57.71% Zn and 245.18 Tons of Lead Concentrates assaying about 74.1. Pb. The figures of quantities treated and produced during July have not been sent to us yet.

Compensation for Dumps. As previously reported by telegram and letters, a meeting was held in Carlisle in the offices of Messrs. Blackburn & Main on July 11<sup>th</sup>, when, after a long discussion, the Mineral Valuer agreed to recommend the British Government to pay Sixpence per ton for all dump material treated and to be treated by N.F.M.D. Ltd., plus Royalty which latter must be paid to the appropriate landlords by the V.M. Co. The Mineral Valuer also agreed to recommend the British Government to make an ex-gratia payment to the V.M. Co., in respect of costs incurred by employing a Solicitor, an Actuary, and an Accountant and travelling expenses to attend meetings. The Solicitors costs which cover about 2½ years, have not yet been received. These are promised by August 11th, and when received these, with the Actuary's costs, £63., and the Accountants costs, £63, which include the travelling expenses of both to attend meetings and their preparations of reports, will, I understand, be included in the Balance Sheet for 1944, although the final decision was not made until July 11th 1945. There will be more costs to be met from July 11th in connection with the claim for rent for the Rampgill Mill Building and the claim for damages to the Building and machinery. The claim for rent for the Building will be proceeded with almost immediately. The claim for damages can only be made when N.F.M.D. de-requisition the property now requisitioned. The Balance Sheet for 1944 is being prepared by Messrs. Greaves Co. and we expect to post it within a few days.

| R o d d e r u p      F e l l      M i n e. |    |     |       |         |     |        |         |                  |   |
|--------------------------------------------|----|-----|-------|---------|-----|--------|---------|------------------|---|
| West Central Flats.                        |    |     |       |         |     |        |         |                  |   |
| Jos. Johnston & Partners.                  |    |     |       |         |     |        |         | 146 Days Worked. |   |
| Drive.                                     | L  | W   | S.F.  | S.M.    | H.  | C.F.   | C.M.    |                  |   |
| No.1.                                      | 35 | x 5 | - 175 | - 16.26 | x 8 | - 1400 | - 39.64 |                  |   |
| " 2.                                       | 18 | x 5 | - 90  | - 8.36  | x 8 | - 720  | - 20.39 |                  |   |
| " 3.                                       | 26 | x 5 | - 130 | - 12.08 | x 8 | - 1040 | - 29.45 |                  |   |
|                                            |    |     |       |         |     |        | 3160    | - 89.48          | ) |
| Wages Paid:- £110: 10: 8.                  |    |     |       |         |     |        |         |                  |   |
| Cost per Cu.M.:- 24/8.                     |    |     |       |         |     |        |         |                  |   |

# MINE STATISTICS

1945.

July

|            | Tons of Ore Mined. |      | Cubic Metres Cut |        |          | Tons per Cubic Metre |        |          | Days Worked. |        |          |           |      |       | Tons per Miner's Day |       |        |       | Per Underground Man |       |              |      | Wages paid per Miner's Day |       |      |       | Wages paid per Underground Man |       |      |         | Wages paid per Cubic Metre |  | No. of Drills Working |  | Dynamite |  |
|------------|--------------------|------|------------------|--------|----------|----------------------|--------|----------|--------------|--------|----------|-----------|------|-------|----------------------|-------|--------|-------|---------------------|-------|--------------|------|----------------------------|-------|------|-------|--------------------------------|-------|------|---------|----------------------------|--|-----------------------|--|----------|--|
|            |                    |      |                  |        |          |                      |        |          | Miners       |        |          | Labourers |      |       |                      |       |        |       |                     |       |              |      |                            |       |      |       |                                |       |      |         |                            |  |                       |  |          |  |
|            | Headings.          | Dev. | Total            | In Ore | In Deads | Total                | In Ore | In Deads | Total        | In Ore | In Deads | Total     | Bar- | Wages | gains                | Total | In Ore | Total | In Ore              | Total | Cubic Metres | Tons | Headings                   | Total | Dev. | Total | Headings                       | Total | lbs. | per ton |                            |  |                       |  |          |  |
|            |                    |      |                  |        |          |                      |        |          |              |        |          |           |      |       |                      |       |        |       |                     |       |              |      |                            |       |      |       |                                |       |      |         |                            |  |                       |  |          |  |
| Nentsbury  |                    |      |                  |        |          |                      |        |          |              |        |          |           |      |       |                      |       |        |       |                     |       |              |      |                            |       |      |       |                                |       |      |         |                            |  |                       |  |          |  |
| ...Mos Av  |                    |      |                  |        |          |                      |        |          |              |        |          |           |      |       |                      |       |        |       |                     |       |              |      |                            |       |      |       |                                |       |      |         |                            |  |                       |  |          |  |
| ...Mos Av  |                    |      |                  |        |          |                      |        |          |              |        |          |           |      |       |                      |       |        |       |                     |       |              |      |                            |       |      |       |                                |       |      |         |                            |  |                       |  |          |  |
| Rodderup   | -                  | -    | 89               | -      | 89       | -                    | -      | 1410     | -            | -      | 0.01     | 0.01      | -    | 0.01  | 0.01                 | -     | 0.01   | 0.01  | 15/2                | 15/2  | 24/8         | 24/8 | -                          | 8     | 401  | -     |                                |       |      |         |                            |  |                       |  |          |  |
| 200 Mos Av | 200                | -    | 175              | -      | 175      | 1.71                 | -      | 155      | -            | -      | 1.44     | 1.44      | 1.12 | 1.12  | 1.12                 | 1.44  | 1.12   | 1.44  | 15/9                | 15/9  | 14/1         | 8/2  | 2                          | 295   | 0.98 |       |                                |       |      |         |                            |  |                       |  |          |  |
| 258 Mos Av | 258                | -    | 103              | -      | 103      | 1.58                 | -      | 154      | -            | -      | 1.54     | 1.54      | 1.07 | 1.07  | 1.07                 | 1.07  | 1.07   | 1.07  | 15/8                | 15/8  | 14/10        | 9/4  | 2                          | 319   | 1.25 |       |                                |       |      |         |                            |  |                       |  |          |  |

## COMPARATIVE STATEMENT.

Nentsbury      Tons in Deads      Rodderup      Tons in Deads

..... Nentsbury      Rodderup      .....

| Month     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 141          | 10/8          | 279          | 9/-           |
| February  | 279          | 9/-           | 210          | 13/1          |
| March     | 210          | 13/1          | 153          | 15/8          |
| April     | 153          | 15/8          | 102          | 15/1          |
| May       | 102          | 15/1          | 107          | 21/3          |
| June      | 107          | 21/3          | 89           | 24/8          |
| July      | 89           | 24/8          |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|             |  |
|-------------|--|
| ...Mos. Av. |  |
| ...Mos. Av. |  |

## Report on the Nenthead Mines August 1945

| REPORT                                                                                                                                                                                                                                                                                                                                                                                                                                         |                   |                  |                  |                |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------|------------------|----------------|
| on the                                                                                                                                                                                                                                                                                                                                                                                                                                         |                   |                  |                  |                |
| NENTHEAD                                                                                                                                                                                                                                                                                                                                                                                                                                       |                   | MINES.           |                  |                |
| AUGUST                                                                                                                                                                                                                                                                                                                                                                                                                                         |                   | 1945.            |                  |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                | <u>Nentsbury.</u> | <u>Rampill.</u>  | <u>Rodderup.</u> | <u>Total.</u>  |
| Ore Mined                                                                                                                                                                                                                                                                                                                                                                                                                                      | Main level        | Taken over       | 15 Tons          | 15 Tons        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                | Inspected.        | by W.F.H.D.      |                  |                |
| Ore Milled                                                                                                                                                                                                                                                                                                                                                                                                                                     |                   |                  | Nil.             | Nil.           |
| Pb. Concs. prdcd.                                                                                                                                                                                                                                                                                                                                                                                                                              |                   |                  | "                | "              |
| % of Recovery                                                                                                                                                                                                                                                                                                                                                                                                                                  |                   |                  | "                | "              |
| Hours Worked                                                                                                                                                                                                                                                                                                                                                                                                                                   |                   |                  | "                | "              |
| Tons per hour                                                                                                                                                                                                                                                                                                                                                                                                                                  |                   |                  | "                | "              |
| Tons in stock                                                                                                                                                                                                                                                                                                                                                                                                                                  |                   |                  | 30 Tons          | 30 Tons.       |
| STOCKS.                                                                                                                                                                                                                                                                                                                                                                                                                                        |                   |                  |                  |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
| Crude Ore                                                                                                                                                                                                                                                                                                                                                                                                                                      | Nil.              | 30 Tons          | 2500 Tons        | 2530 Tons      |
| <u>Galena</u> in stock:- Actually 14 Tons (packed in drums ready for export to the orders of Messrs. Morris Ashby Limited) Book stock: 6.8835 Tons.                                                                                                                                                                                                                                                                                            |                   |                  |                  |                |
| Note:- The surplus stock, amounting to 7.1165 Tons, is accounted for by over-estimating the percentage of moisture content in the ore, when weighed wet, over a period of months. During August, 15.1835 Tons (dry) was sold to Messrs. Walkers Parker & Co., Ltd., Newcastle and 8.167 Tons (dry) was sold to British Pyros White Lead Co. Ltd., West Drayton. The 14 tons ready in drums, is awaiting Messrs. Ashby's shipping instructions. |                   |                  |                  |                |
| <u>Witherite</u> in stock:                                                                                                                                                                                                                                                                                                                                                                                                                     |                   | Nil.             |                  |                |
| <u>Fluor Spar</u> " " "                                                                                                                                                                                                                                                                                                                                                                                                                        |                   | Nil.             |                  |                |
| <u>Compressed Air</u> produced at Nenthead, Nil.                                                                                                                                                                                                                                                                                                                                                                                               |                   |                  |                  |                |
| <u>Compressed Air</u> produced at Rodderup, by Electrical Energy, about 500 cu.ft. per minute at 80/85 lbs per sq. inch pressure at face.                                                                                                                                                                                                                                                                                                      |                   |                  |                  |                |



## **NENTHEAD MINES AUGUST 1945**

NENTSBURY MINE. Main level inspected and repaired from the entrance to Wellhope shaft.

MILL. Operated and maintained by Jas./ H. Harrison. Rent paid up to June 30<sup>th</sup> 1945. Next quarter's rent due Sept. 30<sup>th</sup> 1945.

RODDERUP MINE. In last month's report, I mentioned that Dr. K. C. Dunham, of the Geological Survey Department, was expected to visit Rodderup during August. In my Weekly Report for the week ending August 11th, I reported that Dr. Dunham spent several hours in the mine with me on August 10th. On August 17th, I wrote a letter describing Rodderup Mine, and also referred in detail to the mine in the Weekly Report for week ending August 18th. There is no change in the mine, except that the end of August we had cut into the old Flat which we considered was only a few feet from where we were driving. This old Flat is bearing N., and was left by us in 1938 as being too poor to work with Lead at £15 per ton. The West side contains mineral equal to 4 to 5%. The East side of the Flat is poorer.

The Bearing of No.1 Drift, which, as shown on the plan sent to Belgium on August 17th, was carried forward up to August 10th at 20 degrees East of North, was diverted to 40 degrees East of North and will be driven East North East by West South West, more in line with Rodderup Vein. Crossing the drift, we have cut several small strings bearing N. and S. The strata is badly disturbed. There was some Calcite and Galena on the South wall of the Drift. What the foreman considered was something like a parallel Vein to Rodderup Vein, did not appear to be a Vein when I inspected the mine Sept. 5th. The dislocation in the strata in this area, cannot be explained from the data we possess, but it can be stated that an unusual disturbance has occurred between the farthest point East in No.1 Drift and where the Boreholes were put down about a further 200 feet East. What effect the disturbance has had, cannot be explained until a level has been driven. Dr. Dunham agreed that the only possible solution in this area North of Rodderup Vein is to drive No.1 Drift. A second exploratory possibility should not be overlooked, viz: the Flat area South of the Vein. This is now under water, and with the small number of miners, actually 8 in all, we can only undertake a small amount of work.

The shortage of supply of efficient labour will remain until labour is released from the forces and munition factories, paying high wages from which the Government deduct Income Tax, but labour employed by private employers must be paid either a low wage, or a high wage from which the Government, through the employers, deduct a proportion in the form of Income Tax. From such information as I have been able to obtain from Government officials, the adjustment of lower wages will be made as soon as possible, and Income Tax, and the prices of food clothing and essential commodities will then be lowered also to meet the reduced wages. Now that the War with Japan is over, the Government have promised to release from the forces and from munitions, approximately 2,000,000 men and women during the next six months. In the meantime, we are employing only enough labour to maintain the mines and



carry out as much development as possible with the labour employed. Such labour as we have, is not very efficient.

I have received a letter dated Sept. 1st from Mr. Chaplain, in which he states he hopes to make his promised visit to Nenthead shortly. I hope I may have the pleasure of seeing him soon.

MILL. In good order.

SALES.

Lead Ore: 23.2505 Tons of Lead Cones. were sold during August., and a further 14 Tons is awaiting a shipping permit from Messrs. Morris Ashby Limited, before it can be despatched.

Gravel and Stones. During August, 232.00 Tons of Gravel and Stones were sold at 5s/- and 2s/- per ton on site respectively.

GENERAL. N.F.M.D. For the first seven months of 1945 N.F.M.D. Ltd., treated 144,942 Tons of dump material, from which they recovered 4301.698 Tons of Zinc Concentrates assaying approximately 57.44% Zn, and 274.99 Tons of Lead Concentrates assaying approx. 73.75% Pb.

Compensation. As previously reported the Mineral Valuer agreed on July 11<sup>th</sup> to recommend a payment of sixpence per ton for all dump material treated and to be treated, plus all Royalties based on the terms of the V.M. Co.'s leases, the Royalty to be paid proportionately by us when we receive it, to G.H.E. and Lord Allendale, less £500 which G.H.E. have agreed to pay to the V.M. Co. Messrs. Blackburn & Main, the V.M. Co.'s solicitors, in whose hands this matter has been left, are waiting to learn whether H.M. treasury department have agreed to pay 6d per ton for all dump material treated up to June 30th 1945, which amounted to 510,772 Tons, the value of which at 6d per ton, is £12,769.3.

During August, the District, Valuer, after much argument agreed to pay the V.M. Co., £200 per annum rent for Rampgill Building as and from July 29th 1942 Messrs, Blackburn & Main consulted with me, and we decided to accept the offer, as no better offer could be obtained. We have therefore asked for payment of £600, three years rent due from July 29th 1942 to July 28th 1945, to be made promptly to the V.M. Co.

When the property is de-requisitioned by N.F.M.D. Ltd., the V.M. Co. will then be in a position to make a further claim for damages, but this cannot be made until it has been decided what N.F.M.D. will do with their machinery.

Such is the general position up to date.

If Government pay 6d per ton, the amount due to the V.M. Co. to June 30th 1945 in respect of dumps is

£12,769.3

Rent for Rampgill to July 29 1945

600.0

Plus G.H.E. grant from Royalty

500.0

£13,869.3 plus a

proposed sum of £78.75, ex-gratia, payment in respect of costs.

Part of the sum of £12,769.3 has been previously included in the 1943 and 1944 Balance Sheets, as has also, the £500 grant from G.H.E. All royalties

from minerals extracted from dumps will be paid by N.F.M.D. to us, for the respective landlords.

| <u>Rodderup Fell Mine</u>            |          |          |             |                            |          |             |             |
|--------------------------------------|----------|----------|-------------|----------------------------|----------|-------------|-------------|
| <u>West Central Flats.</u>           |          |          |             |                            |          |             |             |
| <u>Jos. Johnston &amp; Partners.</u> |          |          |             | <u>101 Days Worked.</u>    |          |             |             |
| <u>Drift.</u>                        | <u>L</u> | <u>W</u> | <u>S.F.</u> | <u>S.M.</u>                | <u>H</u> | <u>C.F.</u> | <u>C.M.</u> |
| No.1                                 | 29       | x 6      | = 174       | = 16.16                    | x 8      | = 1302      | = 39.42     |
| " 2                                  | 8        | x 5      | = 40        | = 3.72                     | x 8      | = 320       | = 9.06      |
| " 3                                  | 30       | x 5      | = 150       | = 13.93                    | x 9      | = 1350      | = 38.22     |
| " 4                                  | 13       | x 5      | = 65        | = 6.04                     | x 8      | = 520       | = 14.72     |
| Tonnage to Mill: 15 Tons.            |          |          |             | 3582 - 101.42 @ Days Wages |          |             |             |
| Wages paid: £78: 13: 11.             |          |          |             | Cost per Cu.M.: - 15/6.    |          |             |             |

August 1945.

1945.

|  | Tons of Ore Mined |  |       |  | Cubic Metres Cut |  |         |  | Tons per Cubic Metre |  |         |  | Days Worked |  |         |  |        |  | No of Drills Working | Dynamite |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |        |  |         |  |
|--|-------------------|--|-------|--|------------------|--|---------|--|----------------------|--|---------|--|-------------|--|---------|--|--------|--|----------------------|----------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|--------|--|---------|--|
|  | Headings          |  | Total |  | In Ore           |  | In Dead |  | In Ore               |  | In Dead |  | In Ore      |  | In Dead |  | In Ore |  |                      | In Dead  |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  | In Ore |  | In Dead |  |

### COMPARATIVE STATEMENT.

✠.....Nentsbury .....✠ Rodderup .....✠

Nentsbury ....  
Tons in Deads ....

Rodderup ..... Tons in Deads .....

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

|  |        |
|--|--------|
|  | Mos Av |
|  | Mos Av |

| MONTH     | Cubic Metres | Cost per C. M. | Cubic Metres | Cost per C. M. |
|-----------|--------------|----------------|--------------|----------------|
| January   |              |                | 147          | 10/8           |
| February  |              |                | 279          | 9/-            |
| March     |              |                | 210          | 13/1.          |
| April     |              |                | 153          | 15/8           |
| May       |              |                | 162          | 15/1.          |
| June      |              |                | 107          | 21/5.          |
| July      |              |                | 89           | 24/8           |
| August    |              |                | 101          | 19/1.          |
| September |              |                |              |                |
| October   |              |                |              |                |
| November  |              |                |              |                |
| December  |              |                |              |                |

# Report on the Nenthead Mines September 1945

## REPORT @@@@@@@@@@@@@@

on the

## NENTHEAD MINES @@@@@@@@@@@@@@@@ @@@@@@@@@@

SEPTEMBER 1945.  
@@@@@@@@@@@@@@@@ @@@@@@@@

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------|------------------|------------------|----------------|
| Ore Mined         | Main level        | Occupied         | Nil.             | Nil.           |
|                   | inspected         | by NFMD.         |                  |                |
| Ore Milled        | and kept          |                  | "                | "              |
|                   | in fair           |                  |                  |                |
| Pb. Concs. prdcd. | condition.        |                  | "                | "              |
| % of recovery     |                   |                  | "                | "              |
| Hours worked      |                   |                  | "                | "              |
| Tons per hour     |                   |                  | "                | "              |
| Tons in stock     |                   |                  | "                | "              |

## STOCKS.

|                  | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|----------------|
| <u>Crude Ore</u> | Nil.              | 30 Tons          | 2500 Tons        | 2530 Tons.     |

Galena, in stock 14.00 Tons  
(Packed in Drums ready for export to the  
order of Messrs. Morris Ashby Ltd.)

Note: Since the end of September, we have received payment from Messrs. Walkers, Parker & Co., for 15.1831 Tons of Slime Concentrates. The amount received was £261.11.10. equals £17. 4. 7 per ton, less carriage of 11s/- per ton, equals £16. 18. 7. per ton net. We have also received payment from Messrs. British Pyros White Lead Co. Ltd., for 8.167 Tons. The amount received was £212. 13. 2. equals £24. 10. 0. per ton, less 2s/6d per ton, equals £24. 7. 6. per ton net. Messrs. Morris Ashby have given instructions (Oct. 11th) to despatch part of the 14 tons in stock. We have asked this Co. to pay for the full 14 tons ordered by them, and in stock. It is their fault the ore has not been despatched sooner.

|                             |      |
|-----------------------------|------|
| <u>Witherite</u> , in stock | Nil. |
| <u>Fluor Spar</u> " "       | Nil. |

Compressed Air produced at Nenthead, Nil.

Compressed Air " " Rodderup, by Electrical Energy about  
500 cu. ft. per minute at  
80/85 lbs pressure.

## **NENTHEAD MINES SEPTEMBER 1945**

NENTSBURY MINE. Main level inspected weekly and repairs carried out up to Wellhope Shaft and beyond, East, as far as ventilation would permit.

MILL. Operated and maintained by Jas. H. Harrison.

RODDERUP MINE. No development work underground was done during the month. All the miners and labourers were employed clearing the Middle Level, repairing the East End Shaft collar, which had collapsed and was in a most dangerous condition, and repairing and clearing the water troughs and courses, damaged by a very heavy rainfall. By the end of September, the water-troughs and water-courses were repaired, and the work completed. Good progress was made in clearing the Middle Level, and over 100 ft. of the level was timbered and cleared. Work was suspended on this at the end of the month, and all the miners were removed to clear the top of the East End Shaft. We expect to complete the Shaft repairs by about Oct. 20th and then the miners will complete clearing the Middle Level. Clearing this level and completing the work there, may occupy the miners until about the end of November.

MILL. In good repair.

### SALES.

Lead Ore. None dispatched in September.

Gravel & Stone. During September, 90.5 Tons of gravel was sold.

### GENERAL.

Mons. Chaplain arrived at Nenthead on September 29th.

For the first 8 months of 1945 N.F.M.D. Ltd. treated 162,955 Tons of Dump material and recovered therefrom 4745.088 tons of Zinc Concentrates averaging 57.51% Zn. and 33.34 Tons of Lead Concentrates, assaying about 73.65% Pb.

Compensation. Nothing further has been heard from the Government departments during September re: the payment of the claim sent to the Mineral Valuer by our Solicitors in the latter part of July for £12,769.3 for dumps and royalty due up to the end of June. The Coy's solicitor has written on three occasions requesting an early settlement. Neither have we heard anything more from N.F.M.D. Ltd., the Mineral Valuer, or the District Valuer, re: our claim for 5 years rent for Rampgill Mill. September figures re: dump ore treated are not yet to hand.

Mons. Chaplain will be able to report the position up to date as during his visit we called and discussed the general position with Mr. MacPhail, the Co.'s solicitor, Mr. John Balden, agent for Lord Allendale, and Mr. Hamilton Russell, representing Greenwich Hospital Estates. We also had an interview here with Mr. Rose, who is apparently acting in a dual capacity, first representing the winding up of N.F.M.D. Ltd at Nenthead, and secondly the Ministry of Fuel & Power to some extent. We got very little information of value from Mr. Rose,

neither did we implicate the V.M. Co. in any way in our talk with him. As Mons. Chaplain expects to reach Liege about the time or soon after this report arrives, I will leave it to him to express his opinion on the position here generally. I gave him all the information I could, including my personal recommendations and produced from letters and reports all the written evidence he desired in corroboration. As I propose visiting Cornwall, as I have already intimated, in November, October report is unlikely to be posted before the end of November. During my absence, the foremen at Rodderup have been given a programme to complete the repairs to the East End Shaft and the Middle Level, and if these are completed before I return, to resume driving No. 1 Drift in Rodderup and work the old Flat where some mineral is in evidence.

# MINE STATISTICS

1945.

|           | Tons of Ore Mined |     |       | Cubic Metres Cut |         |       | Tons per Cubic Metre |         |       | Days Worked |         |        |           |        |         | Tons per Miner's Day |       | Cubic Metres per Miner's Day |          | Wages paid per Miner's Day |       | Wages paid per Underground Man |       | Wages paid per Cubic Metre |       | Wages paid per ton |         | No of Drills Working | Dynamite |        |
|-----------|-------------------|-----|-------|------------------|---------|-------|----------------------|---------|-------|-------------|---------|--------|-----------|--------|---------|----------------------|-------|------------------------------|----------|----------------------------|-------|--------------------------------|-------|----------------------------|-------|--------------------|---------|----------------------|----------|--------|
|           | Headings          | Dev | Total | In Ore           | In Dead | Total | In Ore               | In Dead | Total | Miners      |         |        | Labourers |        |         | In Ore               | Total | Cubic Metres                 | Headings | Dev                        | Total | Headings                       | Total | Headings                   | Total | lbs.               | per ton |                      |          |        |
|           |                   |     |       |                  |         |       |                      |         |       | In Ore      | In Dead | In Ore | In Dead   | In Ore | In Dead |                      |       |                              |          |                            |       |                                |       |                            |       |                    |         |                      |          | In Ore |
| Nantsbury |                   |     |       |                  |         |       |                      |         |       |             |         |        |           |        |         |                      |       |                              |          |                            |       |                                |       |                            |       |                    |         |                      |          |        |
| — Mos Av  |                   |     |       |                  |         |       |                      |         |       |             |         |        |           |        |         |                      |       |                              |          |                            |       |                                |       |                            |       |                    |         |                      |          |        |
| — Mos Av  |                   |     |       |                  |         |       |                      |         |       |             |         |        |           |        |         |                      |       |                              |          |                            |       |                                |       |                            |       |                    |         |                      |          |        |
| Rodderup  | —                 | —   | —     | 84               | —       | 84    | —                    | —       | —     | —           | —       | —      | —         | —      | —       | —                    | —     | —                            | —        | —                          | —     | —                              | —     | —                          | —     | —                  | —       | —                    |          |        |
| 8 Mos Av  | 227               | —   | 227   | 155              | —       | 155   | 1416                 | —       | 1416  | 148         | —       | 148    | 151       | —      | 151     | 154                  | —     | 154                          | 158      | —                          | 158   | 158                            | —     | 158                        | 152   | 1014               | 2       | 893                  | 142      |        |
| 9 Mos Av  | 202               | —   | 202   | 142              | —       | 142   | 1442                 | —       | 1442  | 184         | —       | 184    | 157       | —      | 157     | 151                  | —     | 151                          | 158      | —                          | 158   | 158                            | —     | 158                        | 151   | 151                | 107     | 2                    | 294      | 145    |

## COMPARATIVE STATEMENT.

✱.....Nentsbury .....✱..... Rodderup .....✱

Nentsbury      ...      Tons in Dead      ...  
Rodderup      ...      Tons in Dead      ...

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

| Nentsbury |  |
|-----------|--|
| Mos Av    |  |
| Mos Av    |  |

| MONTH     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   | 141          | 16/8          |              |               |
| February  | 279          | 9/-           |              |               |
| March     | 210          | 15/1          |              |               |
| April     | 153          | 15/8          |              |               |
| May       | 102          | 15/1          |              |               |
| June      | 107          | 21/3          |              |               |
| July      | 89           | 24/8          |              |               |
| August    | 101          | 19/1          |              |               |
| September | 59           | 11/10         |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

# Report on the Nenthead Mines October 1945

## R E P O R T

on the

N E N T H E A D

M I N E S

O C T O B E R 1 9 4 5.

|                   | <u>Nentsbury.</u>                           | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|---------------------------------------------|------------------|------------------|----------------|
| Ore mined         | Main Level                                  | Occupied         | Nil.             | Nil.           |
| Ore Milled        | inspected and<br>kept in fair<br>condition. | by<br>N.F.M.D.   | "                | "              |
| Pb. Concs. prdcd. |                                             |                  | "                | "              |
| % of Recovery     |                                             |                  | "                | "              |
| Hours worked      |                                             |                  | "                | "              |
| Tons per hour     |                                             |                  | "                | "              |
| Tons in stock     |                                             |                  | "                | 30 Tons.       |

|           | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------|-------------------|------------------|------------------|----------------|
| Crude Ore | Nil.              | 30 Tons          | 2500 Tons        | 2530 Tons.     |

Galena in stock .....Nil.

(Note: During the month 14 Tons of Concentrates were sold to Messrs. Morris Ashby Ltd., and paid for. 4.9 Tons of this was despatched, and 9.1 Tons will be despatched as soon as shipping instructions have been received. The amount received was £336. 0. 0., which gives a net price of £24. 0. 0. per ton, less 2s/6d carriage to Alston Station, for the Ore at the mine.)

Witherite in stock.....Nil.

Fluor Spar in stock.....Nil.

Compressed Air produced at Nenthead, Nil.

Compressed Air produced at Rodderup, by Electrical Energy, 300 cu.ft. per minute at 80/85 lbs pressure used mainly for pumping the water from the main workings.



## **NENTHEAD MINES OCTOBER 1945**

NENTSBURY MINE. Main Level inspected weekly, and repairs carried out up to Wellhope Shaft and beyond. Some slight damage was caused to the buildings at Wellhope Shaft, but was not of a serious nature. The police of Cumberland and Northumberland were informed, and the property inspected by them. The matter is left in the hands of the police.

MILL. Operated and maintained by Messrs. J. H. Harrison.

RODDERUP MINE. No development work underground was done during the month. All the miners and labourers were engaged in repairing the East End Shaft, the Water-courses and clearing the Middle Level. This work was satisfactorily completed by the end of the month, and the Hydro-Compressor put into action.

This Compressor is working well, and should result in a reduction in the cost of electricity.

MILL. In good repair.

### SALES.

Lead Ore. 14 Tons was sold to and paid for by Messrs. Morris Ashby Ltd., of which 4.9 Tons has been despatched, and 9.1 Tons await their shipping instructions. The sum received was £336. 0. 0. We have no stock in hand now.

GENERAL. We have not yet received any figures of dump material treated by N.F.M.D. for September and October, or of the Lead and Zinc Concentrates produced. I am writing then today (Nov. 26th) requesting them to furnish us with these immediately.

Compensation. Nothing further re: Compensation, for Dump material used, Royalty, in respect of Concentrates produced, and Rent, promised for Rampgill Mill, was settled by payment during October. The Co.'s solicitors have been pressing for an early settlement, and in all probability, if the amount is not promptly paid, we shall claim not less than 2% interest from the Government for all unpaid a/cs. This may have the effect of forcing the Government to pay promptly. It is now common knowledge that N.F.M.D. propose to close the Mill, so far as Nenthead dumps are concerned, by Nov. 30th 1945. We shall watch the movements of N.F.M.D. very carefully. I shall send a more detailed account in my November report, of the action we have taken in the Co.'s interest during November. The November report will be posted during the week ending December 8th.

## October 1945.

[illegible]

### COMPARATIVE STATEMENT.

Nentsbury .....  
Tons in Dead .....  
Nentsbury .....  
Rodderup .....

| MONTH     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 141          | 10/8          |
| February  |              |               | 274          | 9/-           |
| March     |              |               | 210          | 13/1.         |
| April     |              |               | 153          | 15/8          |
| May       |              |               | 102          | 15/1          |
| June      |              |               | 107          | 21/3          |
| July      |              |               | 89           | 24/8          |
| August    |              |               | 101          | 19/1.         |
| September |              |               | 39           | 11/10.        |
| October   |              |               | 11           | 15/12.        |
| November  |              |               |              |               |
| December  |              |               |              |               |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

|  |        |
|--|--------|
|  | Mos Av |
|  | Mos Av |

# REPORT

on the

NENTHEAD

MINES

NOVEMBER 1945.

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------|------------------|------------------|----------------|
| Ore Mined         | Main Level        | Xix.             | Nil.             | Nil.           |
|                   | inspected         | Occupied         |                  |                |
| Ore Milled        | weekly and        | by               | "                | "              |
|                   | kept in           | N.F.M.D.         | "                | "              |
| Pb. Cones. prdcd. | fair con-         |                  | "                | "              |
|                   | dition.           |                  | "                | "              |
| % of Recovery     |                   |                  | "                | "              |
| Hours Worked      |                   |                  | "                | "              |
| Tons per hour     |                   |                  | "                | "              |
| Tons in Stock     |                   |                  | 30 Tons          | 30 Tons.       |

## STOCKS.

|           | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------|-------------------|------------------|------------------|----------------|
| Crude Ore | Nil.              | 30 Tons          | 2500 Tons        | 2530 Tons      |

Galena, in stock,.....Nil.

(Note: All the ore in stock, bought and paid for by Messrs. Morris Ashby Ltd., has now been despatched)

Witherite, in stock,.....Nil.

Fluor Spar, " " .....Nil.

Compressed Air, produced at Nenthead, Nil.

Compressed Air, produced at Rodderup, by Electrical Energy and Water Power, about 500 cu.ft. per minute at 80/85 lbs. pressure at the face. Compressed Air is used for driving the rock-drills and for pumping. Pumping is mainly done by Compressed Air produced by Water Power. At present this ~~xxxx~~ source of power is used day and night, without an attendant at night, to lower the water below the Flats to the South side. When lowered to a sufficient depth, I shall make a personal inspection of the Flats on the South side.

NENTHEAD MINES

## NOVEMBER 1945

NENTSBURY MINE. The main level is inspected weekly and kept in fair condition from the mine entrance up to and beyond Wellhope Shaft East. Nothing further has developed re: the slight damage done at Wellhope Shaft Top. Repairs to the damaged places have been carried out.

MILL. Operated and maintained by Jas. H. Harrison.

RODDERUP MINE. During November and after all the repairs to the Shaft top had been satisfactorily completed, and the Middle Level cleared and the water-courses and main pipe-line put in order again, the miners have been employed in driving the No.1 Drift and in the old West Flat.

Early in November, the strata which was the Tynebottom Limestone, was thrown down in the No.1 Drift East, and the forebreast of the drive was in Plate. Before the strata was thrown down, there was a rib of Lead Ore about 3" wide on the North side of the drift, in the Plate. This is an unusual occurrence, as generally very little, if any, ore is found in the Plate. Continuing driving, we came to the conclusion, that apparently, a fault, bearing N.W. by S.E., had cut across the drift from the North side. If this is so, this would seem to be a new fault, not disclosed when working the Flats in the Western area in 1940-43. After putting out boreholes in late 1942 early 1943 and examining the cores with Dr. Dunham, we knew that between the foot of the Incline and the East End Shaft, the strata was thrown both up and down, and we concluded, from past experience in Alston Moor, that such disturbances could only be caused by faults, and, until we cut the ground by driving a drift, we shall not be able to state where the faults are or what influence they have.

I inspected the mine on Nov. 28th, when I saw what had happened as described above. The ore, such as it was, in the drift No.1, was not payable, and neither was the ore mined in the old West Flat.

When Mr. Chaplain visited Nenthead, I discussed with him and recommended that, before abandoning Rodderup mine, a new Incline should be driven West to open up the Flats on the South side of Rodderup Vein. This was approved by the General Manager in his letter to me dated Nov. 3rd, in which the sum of about £5000 was allocated for carrying out the work, subject to N.F.M.D. paying the Company the money which the Mineral Valuer agreed to recommend to pay on July 11th, which amount, although all possible pressure has been and is being brought to bear on them by the Company's solicitor and myself, has still not been paid up to today, Dec. 4th 1945.

In connection with this proposed new Incline, I would like to be allowed to give this matter further consideration when I go in Rodderup this week. In the Weekly Report up to Dec. 1st, I have referred to the possibility of getting through the fallen ground by timbering in the old Incline and re-enforcing with Concrete Blocks. Tomorrow, I shall make a careful examination, and if after inspection I agree with the foreman that this can be done, I propose to put the work in hand at once. This Incline, when cleared, will give us access to the Flats on the Southern side after the water has been lowered, and might, possibly give us access sooner and be less costly than driving a new one. The existing Incline gives access to the Flats on the North side in the Eastern area, and by

clearing the old Incline we would have access to both North and South sides in the Western area. The monthly expenditure, if we should do the work now towards clearing the incline, will not be increased. I am anxious to get to places where payable mineral is likely to be found, as soon as possible. To meet today's costs, and possibly higher costs in 1946, we need either an ore yielding 10% Galena, or working places less hard, where a miner can break more ore per day at no increased cost.

MILL. In fair repair.

SALES.

Lead Ore. All Lead Ore is sold, despatched and paid for.

Gravel. Sales, amounted to 116.25 Tons.

GENERAL. We have not yet received from N.F.M.D. the figures for dump material treated since August. We have written twice for these figures, but the first time N.F.M.D. only furnished the quantities of Lead and Zinc Concentrates recovered.

My last letter to them was on Nov. 29th.

I am enclosing a copy of a letter received by the Company's solicitor from the District Valuer, and a copy of the letter I have received from the Solicitor after I had written him to accept the months' notice of N.F.M.D.'s termination of the arrangement by which the V.M. Co. supplied then with water, the supply not being required after Dec. 31st 1945 Yesterday, Dec. 3rd I received a visit here from Mr. Rose, who was and may still be the Controller of Non-Ferrous Mineral Development, a branch of the Ministry of Supply which no doubt instructed the District Valuer to tender the notice received by the Company's solicitor.

With Mr. Rose, were a Mr. Tomlinson, whoever he may be, and Mr. Dawson who is charge of N.F.M.D. plant at Rampgill Mill. A week or more ago, N.F.M.D. posted notices, I have been informed, to the effect that work in Rampgill Mill would cease on Nov. 30th, but on December 1st a further notice was posted informing the employees that they could not leave as the Mill would continue operating, not on dump material from Nenthead, but on material, containing Barytes and Zinc, brought from near Haydon Bridge, roughly 20 miles away. The object of their visit, was to ask for my co-operation to extend the use of the Co.'s water beyond Dec. 31st if they required it. It was also suggested that the Co. might consider taking over the control and management, I presumed, of the plant in Rampgill. I know that the Local Authority has served N.F.M.D. with a Schedule of work required to be done by them before they leave Nenthead (see copy enclosed). I also have reason to know that the plant and machinery is in an inefficient condition, and reading between the lines, I concluded that what N.F.M.D. would like V.M. to do was to relieve them of any further responsibility by assuming control of a more or less inefficient plant without any ore to maintain it.

My reply to Mr. Rose and his friends was that the V.M. Co. wanted full payment to date on the terms suggested, at once, before discussing anything further, and that the sooner they paid the money due to the V.M., the sooner they could come with another suggestion, and the more likelihood there would be of the V.M. agreeing.

I was as harsh as I could respectfully be to these people, because I consider they have so far treated the Company badly. Mr. Rose again promised to do all he could to get the money paid promptly. He said the matter is now in the hands of the Law Officers of the Crown.

The Co.'s solicitors during November have requested payment and have had an agreement drawn up whereby N.F.M.D. are to pay £200 per annum rent for Rampgill since July 1942, and have by letter and verbally, asked them to pay the amounts agreed. During my holiday, the Local Authority called a meeting with the management of N.F.M.D. who were represented by people from London and the Mineral Valuer etc. The Valuer's called to see Mr. MacPhail of Blackburn & Main, who told them we would claim 2% interest on the money which the Mineral Valuer had recommended should be paid and which the V.M. Co. had agreed to accept, but which had not been paid. Mr. MacPhail considers the money will eventually be paid, but when, neither he nor I can state. I must state I consider the behaviour of N.F.M.D. towards the V.M. Co. is little short of a scandal. I shall keep you posted weekly of any change either in the mine or outside, and will immediately inform you when N.F.M.D. pay any money.

1946.

|            | Tons of Ore Mined |       | Cubic Metres Cut |         | Tons per Cubic Metre |        | Days Worked |        |         |       | Tons per Miner's Day |       | Cubic Metres per Miner's Day |       | Wages paid per Miner's Day |       | Wages paid per Underground Man |       | Wages paid per Cubic Metre |       | No of Drills Working | Dynamite |         |
|------------|-------------------|-------|------------------|---------|----------------------|--------|-------------|--------|---------|-------|----------------------|-------|------------------------------|-------|----------------------------|-------|--------------------------------|-------|----------------------------|-------|----------------------|----------|---------|
|            | Headings          | Total | In Ore           | In Dead | Total                | In Ore | In Dead     | In Ore | In Dead | Total | In Ore               | Total | In Ore                       | Total | Headings                   | Total | Headings                       | Total | Headings                   | Total |                      | lbs.     | per ton |
|            |                   |       |                  |         |                      |        |             |        |         |       |                      |       |                              |       |                            |       |                                |       |                            |       |                      |          |         |
| Nants-bury |                   |       |                  |         |                      |        |             |        |         |       |                      |       |                              |       |                            |       |                                |       |                            |       |                      |          |         |
| — Mos Av   |                   |       |                  |         |                      |        |             |        |         |       |                      |       |                              |       |                            |       |                                |       |                            |       |                      |          |         |
| — Mos Av   |                   |       |                  |         |                      |        |             |        |         |       |                      |       |                              |       |                            |       |                                |       |                            |       |                      |          |         |
| Reddarp    | —                 | —     | —                | —       | —                    | —      | —           | —      | —       | —     | —                    | —     | —                            | —     | —                          | —     | —                              | —     | —                          | —     | —                    | —        | —       |
| 0 Mos Av   | 182               | —     | 129              | —       | 129                  | 129    | —           | 129    | —       | 129   | 129                  | —     | 129                          | —     | 129                        | 129   | 129                            | 129   | 129                        | 129   | 129                  | 269      | 1-48    |
| 1 Mos Av   | 105               | —     | 105              | 125     | —                    | 105    | 125         | —      | 105     | 125   | 105                  | —     | 105                          | 125   | 105                        | 125   | 105                            | 125   | 105                        | 125   | 105                  | 271      | 1-05    |

## COMPARATIVE STATEMENT.

✠.....Nentsbury .....✠ Rodderup .....✠

Nentsbury ....

|          |      |               |      |
|----------|------|---------------|------|
| Rodderup | .... | Tons in Deads | .... |
|----------|------|---------------|------|

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

|        |  |
|--------|--|
| Mos Av |  |
| Mos Av |  |

| MONTH     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               | 141          | 10/8          |
| February  |              |               | 279          | 9/-           |
| March     |              |               | 210          | 13/1.         |
| April     |              |               | 153          | 15/8          |
| May       |              |               | 162          | 15/1.         |
| June      |              |               | 107          | 21/8.         |
| July      |              |               | 89           | 24/8          |
| August    |              |               | 101          | 19/1.         |
| September |              |               | 39           | 11/10.        |
| October   |              |               | 11           | 15/1½.        |
| November  |              |               | 101          | 24/8.         |
| December  |              |               |              |               |

Report on the Nenthead Mines December 1945 (Note error in date on doc.)

# REPORT

\*\*\*\*\*

on the

NENTHEAD MINES

\*\*\*\*\*

DECEMBER 1946.

\*\*\*\*\*

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------|------------------|------------------|----------------|
| Ore Mined         | Main level        | Occupied         | 30 Tons          | 30 Tons        |
| Ore Milled        | inspected         | by NFMD.         | 60 "             | 60 "           |
| Pb. Concs. prdcd. | weekly and        |                  | 1.65 "           | 1.65 "         |
| % of Recovery     | kept in           |                  | 2.75%            | 2.75%          |
| Hours worked      | good cond-        |                  | 12 hours         | 12 hours       |
| Tons per hour     | ition.            |                  | 5 Tons           | 5 Tons         |
| Tons in stock     | Nil.              |                  | Nil.             | Nil.           |

## STOCKS.

|           | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------|-------------------|------------------|------------------|----------------|
| Crude Ore | Nil.              | Nil.             | 2500 Tons        | 2500 Tons.     |

Galena, in stock, ..... 1.65 Tons.

Witherite, in stock ... Nil.

Fluor Spar, " " ... Nil.

Compressed Air produced at Nenthead, Nil.

Compressed Air produced at Rodderup, mainly by Water Power, about 250 cu. ft. per min. at 80 lbs pressure and used wholly for pumping. The water throughout the mine has been lowered several feet below the level of the Flatts on the South side of Rodderup Vein.



## **NENTHEAD MINES DECEMBER 1945**

NENTSBURY MINE. The main level has been inspected weekly, and, when necessary, repaired up to and East of Wellhope Shaft.

MILL. Operated and maintained by Jas. H. Harrison.

RODDERUP MINE. Except for a few feet driven East in No.1 Drive, and four shifts worked in the old Flatt west of the new Incline, where the ore in each place was of poor grade, all the few miners have been employed clearing and repairing the old Incline where a fall of ground occurred soon after the new Incline was put into operation. When Mons. Chaplain visited Nenthead in October, I suggested to him the driving of a new Incline, west of the incline where the fall occurred, to give access to the ground South of Rodderup Vein. In a note from the Administrator Director General, dated 3rd Nov. 1945 this was approved, subject to the V.M. receiving the amounts due to them from N.F.M.D. After returning from my vacation on the 3rd Nov., I reconsidered the whole matter, and by going down an old Winze, west of the fall, and climbing back East over part of the fall, I considered it would be cheaper, and access to the South Flats would be gained much sooner, if we could restore the old Incline, by using timber first and re-enforcing with Concrete Blocks later. As our labour supply is very small, it was not possible to continue driving East, and, at the same time, rebuild the old Incline and secure the ground as quickly as possible. I therefore decided to use the water power for pumping and thus lower the water so as to give access to the South Flats, without incurring any cost for electrical energy, when the old Incline was repaired, and to proceed at once with the work of restoring the old Incline, in which there existed both tram-ways and pipe-lines for air and water, all of which have since been found to be in fair condition. Up to the end of December good progress had been made, and, unless any unforeseen trouble occurs, the restoration of the old Incline should be completed by mid-February when we should be able to proceed to the South Flats to commence work there in March. From the sum of £5000 allocated, there should be a substantial sum left to do exploratory work in the South Flats and, if more labour is available, to develop also in the East portion of the Flats in No.1 Drive E. The mine foreman stated on Dec. 31st that he considered there was only another 20 feet to clear and secure in the old Incline, but the 20 feet referred to is the worst 20 feet of the Fall and will have to be secured by double rows of concrete blocks after being timbered. I consider it is possible to do the work but the 20 feet now to be cleared may take longer proportionately than the 100 feet already cleared and well secured.

MILL. In fair condition.

SALES.

Lead Ore. Nil.

Gravel etc. 58.50 Tons at the usual prices.

GENERAL. On Dec. 19th, as previously reported by letter, Mr. W. C. C. Rose, to whom I referred in my November report, handed over a cheque drawn in favour of the V.M. Zinc Co. for £13,500. This, it was stated, was payment on account and was made up of £12,000 for dumps, based on the settlement recommended on July 11th 1945 at 6d per ton, and £3000 on account of Royalties from which £1500 was deducted for Income Tax at the rate of 10s/- in the £. Information re: the payment of Royalty has been sent to the representatives of both Greenwich Hospital Estates and Lord Allendale, with a request that they (the representatives of both parties) will inform us that they agree to the proportion of the £1500 to be paid to each party. We have not yet received a reply from either party.

We shall, of course, be entitled to the first £500 paid to Greenwich Hospital Estates, and it is possible Lord Allendale will also grant us something towards diamond-drilling in Nentsbury. This matter I shall take up with Lord Allendale's agent when I next visit him. I propose then to discuss with both parties, the question of a positive assurance that the V.M. contracts may expire Jan. 1st 1949 by giving six months' notice.

N.F.M.D. actually closed their Mill during December, and as far as we know have not treated any dump material since Nov. 30<sup>th</sup> 1945. Up to that time, N.F.M.D. treated in 1945 a total of 225246 Tons of dump ore, and produced therefrom 6295 Tons of Zinc Concentrates, assaying about 57% Zn., and 449.8087 Tons of Lead Concentrates assaying about 71.8% Pb. Whether or not N.F.M.D. treated any ore in December, or recovered any Zinc or Lead Concentrates from cleaning up the Mill, we do not know yet. Assuming they did not recover any Concentrates or treat any dump ore, the total quantity of dump ore treated by N.F.M.D. from the 19th of July 1943 to Nov. 30th 1945, amounted to 614591 Tons. The total quantity of Zn. concentrates recovered amounted to 19307.9003 tons, assaying on average about 57.5% Zn., and 1428.8207 Tons of Pb. Concentrates assaying on average about 71.8% Pb. Based on 6d per ton, 614591 Tons, up to Nov. 30th 1945, would yield the V.M. Co. £15364. 15. 6.

By payment of £12,000 on a/c, N.F.M.D. or the Treasury, whom, I understand, we have now to approach for payment, owe the V.M. Co. £3364. 15. 6., plus Royalty due on Concentrates recovered since June 30th 1945 and the balance then unpaid. Royalty, of course, will have to be paid over to the Landlords. Rent due to the V.M. for Rampgill Mill up to Jan. 29th 1946, will be £700, at the rate of £200 per annum since the building and land was requisitioned on July 29th 1942, plus any just claim we have against N.F.M.D. or the British Treasury for damages. I therefore estimate that the V.M. Co. should be entitled to £3564. 15s. 6d. for dumps, plus £500 granted by G.H.E. (which was included in the 1943 Balance Sheet), plus £700 rent for Rampgill Mill, a total of £4564.15. 6., not taking into account any concession we may obtain from Lord Allendale or any claim we may have for damages. There is still a quantity of dump ore not treated by N.F.M.D. It is not possible to estimate the quantity left, because they have been left in such a condition that accurate measurements could not be taken, and furthermore, N.F.M.D. have not yet derequisitioned either Rampgill Mill or the dumps. At present, they appear to be levelling the dumps as

requested by the Rural District Council. When N.F.M.D. derequisition the dumps, I shall consult the Company's solicitors before accepting the derequisitioning order. It is, however, my personal opinion that we cannot refuse to accept the order, but can request N.F.M.D. to place everything in a safe condition or pay damages for not doing so.

The Annual Report for the year 1945, will be submitted after I have received complete figures from N.F.M.D. and have obtained other figures and information re: matters for 1945 not yet received. The Annual Report, therefore, may not be completed and posted before early February.

| MINE STATISTICS..... <i>December</i> .....19 <i>45</i> . |                   |     |       |                  |          |       |                      |          |       |             |          |        |          |                      |              |                              |        |                                |               |                           |       |                      |       |          |         |     |      |
|----------------------------------------------------------|-------------------|-----|-------|------------------|----------|-------|----------------------|----------|-------|-------------|----------|--------|----------|----------------------|--------------|------------------------------|--------|--------------------------------|---------------|---------------------------|-------|----------------------|-------|----------|---------|-----|------|
|                                                          | Tons of Ore Mined |     |       | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked |          |        |          | Tons per Miner's Day |              | Cubic Metres per Miner's Day |        | Wages paid per Underground Man |               | Wages paid per ton of Ore |       | No of Drills Working |       | Dynamite |         |     |      |
|                                                          | Headings          | Dev | Total | In Ore           | In Deads | Total | In Ore               | In Deads | Total | In Ore      | In Deads | In Ore | In Deads | Total                | Bar-<br>gins | Total                        | In Ore | Total                          | Head-<br>ings | Dev                       | Total | Head-<br>ings        | Total | lbs      | per ton |     |      |
|                                                          |                   |     |       |                  |          |       |                      |          |       |             |          |        |          |                      |              |                              |        |                                |               |                           |       |                      |       |          |         |     |      |
| Nants-<br>bury<br>_Mos Av<br>_Mos Av                     |                   |     |       |                  |          |       |                      |          |       |             |          |        |          |                      |              |                              |        |                                |               |                           |       |                      |       |          |         |     |      |
| Rodderup                                                 | 30                | -   | 30    | 20               | -        | 20    | 0.37                 | -        | 0.37  |             |          | 33     | -        | 33                   |              |                              | 0.87   | 0.87                           | 0.90          | 15.2                      | -     | 15.2                 | 14.10 | 14.10    | 2       | 40  | 1.07 |
| 11 Mos Av                                                | 165               | -   | 165   | 123              | -        | 123   | 1.34                 | -        | 1.34  | 110         | -        | 110    | -        | 110                  | -            | 122                          | 1.05   | 1.05                           | 1.05          | 15.8                      | -     | 15.8                 | 15.7  | 15.7     | 2       | 271 | 1.03 |
| 12 Mos Av                                                | 151.4             | -   | 151.4 | 114              | -        | 114   | 1.34                 | -        | 1.34  | 109         | -        | 109    | -        | 109                  | -            | 115                          | 1.05   | 1.05                           | 1.34          | 15.8                      | -     | 15.8                 | 15.7  | 15.7     | 2       | 251 | 1.03 |

**ANNUAL REPORT**  
**On the**  
**NENTHEAD MINES**  
**1945**

NENTHEAD.

At Nenthead during 1945, Messrs. Non-Ferrous Minerals Development Ltd., on whose behalf the Rampgill Mill building was requisitioned in July 1942, continued, up to the end of November, to treat material from the "Hillersdon", "Rampgill" and "Smallcleugh" Dumps, which were also requisitioned on their behalf in April 1943, through the Ministry of Supply, as well as taking 500 gallons of water per minute for 24 hours daily from the V.M. supplies, for which service the V.M. Co. received £375 per annum. On November 29th, the District Valuer served the Co.'s solicitors, Messrs. Blackburn & Main of Carlisle, with a notice to terminate the water supply on Dec. 31st 1945, and the supply was accordingly disconnected on that date. Rampgill Mill, in which N.F.M.D. Ltd., installed a considerable amount of new machinery to treat the dump material, has not yet been derequisitioned and is still in the occupation of N.F.M.D. Ltd., and may remain so for some time to come.

During the year pressure was applied to the Government departments concerned, to recognise and to pay compensation for the dump material treated and the Royalty due to the landlords in respect of the minerals recovered. After numerous interviews and debates, much correspondence, and the enlistment of the services of a highly-qualified Actuary through our Auditors, it was agreed at a meeting with the Mineral Valuer in Carlisle on July 11th 1945, that he would recommend to H.M. Treasury the payment to the V.M. Co. by the Ministry of Supply compensation at the rate of 6d (sixpence) per ton for all dump material treated and to be treated, plus the Royalty due to the landlords.

At the end of 1945 the total quantity of dump material treated by N.F.M.D. Ltd., amounted to 614184 Tons, from which 19,316.8813 Tons of Zinc Concentrates, assaying about 57.5%, and 1428.8207 Tons of Lead Concentrates, assaying about 71.7% Pb., were recovered.

The compensation in respect of the Dump material treated, at 6d per ton, is £15354. 12. 0. of which we have received, as a result of the utmost possible pressure being brought to bear upon the different officials and departments involved, the sum of £12,000 paid to us on account by the Ministry of Supply on December 19th. The Ministry also paid £3000, less Income Tax at 10s/- in the £., on account of the Royalty due, the actual amount of the cheque received by the V.M. Co., being £13,500, with a Certificate of Tax Deduction of £1500. At the end of 1945 the Government owed us, as per statement sent to Head Office, £3354. 12. 0. balance of compensation due in respect of the Dump material treated, £1543. 11. 0. in respect of Royalty, and £78. 15. 0. in respect of expenses which the Mineral Valuer stated at the meeting on July 11th he would recommend for payment. The payment in respect of Royalty, when received, will be paid to the Landlords when they have agreed on the proportions due to each, but in addition to the above amounts, the Government agreed to pay an annual rental of £200 for the use of Rampgill Mill, and since

the close of the year we have received from the Ministry a cheque for £697. 2. 5. In respect of rent from 26th July 1942 to 25th December 1945, plus £12. 12. 0. allowed for Surveyor's Fees. The V.M. Co., has still to obtain, for its own benefit, the sum of £3554. 12. 0. compensation, and £78. 15. 0. expenses promised, making a total of £3433. 7. 0., approximately the term "approximately" being used advisedly, as the Government do not always use the same periods as ourselves, as in the case of the rent for Rampgill Mill which has been paid to Dec. 25th 1945 and not Dec. 31st 1945 as might have been expected, and the question of Interest may or may not arise on overdue payments.

This is the position of Nenthead at the end of 1945.

It is impossible to estimate what the position will be at the end of 1946, or even during 1946 should the Ministry of Supply or whatever department of the Government having the matter in hand, de-requisition Rampgill Mill and the sites of the dumps, and remove their machinery, the V.M. Co., will then have to consider a further claim for damages, but until the property is released and the Government plant and machinery removed, it is not possible to prepare a claim.

Regarding the sale of the aerial ropeway, a meeting between a Consulting Ropeway Engineer, Mr. Reginald H. Pearson and a client of his, was arranged to be held at Nenthead on January 17th, but owing to the state of the roads Mr. Pearson was unable to travel over the hill from Wearhead to Nenthead. we are therefore advertising the ropeway for sale, in "The Machinery Market". Respecting other machinery, most of which is in Rampgill Mill which is requisitioned, our solicitors advise us to be careful in offering for sale until the Mill is derequisitioned as should we do so it may affect the Company's claim for damages. In this matter, we are acting on the advice of the Company's solicitors.

#### NENTSBURY.

Mine. During 1945, the main level up to, and about 600 metres East of, Wellhope Shaft has been kept in a fair state of repair. Beyond that point the ventilation is bad, and it is impossible to go further until Compressed Air has been circulated. No mining was carried out during 1945 and no development has been done in the mine for several years. The Ore reserves remain as before.

#### Programme for 1946.

With regard to the programme to be carried out in Nentsbury Mine during 1946, all provisional arrangements have been made, but not until definite instructions were given in a letter dated Dec. 29th from the General Manager, after the Company had received the £12,000 compensation for the dump material on Dec. 19th 1945 could we actually order what is necessary to put the main pipeline in order from Perry Dam to Middlecleugh Pelton Wheel and Compressor. This job must be executed first. Enquiries were sent to several firms for pipes and after much delay several quotations were received. In the meantime, we got in touch through Messrs. Brown, Paterson & Co., Newcastle, with the Government Supplies Disposal Board in London. As the prices quoted us by the several firms are much higher than those quoted by the Disposal Board, we

propose purchasing from the Disposal Board but first wish to inspect the pipes and are awaiting permission from them to do so. In any case, if we had the pipes, we would not be able to take them up the Fell at present, owing to weather conditions. I estimate that it will take at least a fortnight to three weeks to lay the pipes after we obtain delivery.

The next question is, what is the condition of the Compressed Air pipe-line from Nenthead to Wellhope Shaft? No Compressed air has passed through this pipe-line since N.F.M.D. requisitioned the water supply in July 1943. In all probability, many of these 6" pipes will have to be replaced. I do not therefore see much hope of being able to pump out the water from the Winze, which we propose to use as a convenient centre for the Diamond Drilling operations, or make any alternative arrangements in Nentsbury Mine before April and possibly later.

Immediately we procure pipes, and the weather permits we shall commence laying the main pipe-line and testing it, following up by testing and if necessary repairing, the 6" Compressed Air Line.

Details for the Diamond Drilling programme in Nentsbury were posted to Head Office on Jan. 11th 1946, the estimated footages to be drilled to intersect the five veins near the Winze mentioned, being as follows, the footages being given for one hole in the Quarry Hazle Stratum, and for a second borehole being drilled in the Four Fathom Limestone, viz: -

|                                                         | <u>For 1<br/>Borehole</u> | <u>For 2<br/>Boreholes</u> |
|---------------------------------------------------------|---------------------------|----------------------------|
| 1. Cox Vein (N. & S.)<br>from the Winze                 | 50 feet                   | 100 feet approx.           |
| 2. Dupont Vein (N. & S.)<br>continuing from Cox         | 100 "                     | 200 " "                    |
| 3. Treloar Vein (E. & W.)<br>Diagonally from Winze      | 150 "                     | 300 " "                    |
| 4. High Raise (E. & W.)<br>South from Winze             | 200 "                     | 400 " "                    |
| 5. First Sun Vein (E. & W.)<br>continuing from H. Raise | <u>150 "</u>              | <u>300 "</u> "             |
| Total footage to be drilled                             | <u>650 feet</u>           | <u>1300 feet</u>           |

From information received, I considered the cost of drilling only, by contract, would be 30/- per foot, which gives a total of £1950 to drill the 1300 feet calculated above, to which sum must be added the cost of pumping and probably deepening the Winze, incidental costs for various items which are sure to arise, and loss of time by the Contractor should there be any trouble with the Compressed air supply, all of which must be allowed for.

Everything will be done to commence the programs at Nentsbury at the earliest possible opportunity after the necessary materials and more labour have been obtained.

Nentsbury Mill was operated and maintained by Jas. H. Harrison during the year, at a rent of £500 per annum. The conditions of the Agreement between the V.M. Zinc Co. and Jas. H. Harrison, are that the Mill was let to Jas. H. Harrison from the 14th day of September 1944 for one year or until the cessation of the then existing hostilities with Germany, whichever should be the shorter period, and thereafter the Agreement could be determined by either party giving to the other one month's notice in writing expiring at the end of any calendar month. Messrs. Harrison can only use the Mill for treating and dressing Barytes Ore. They pay the Insurance premium to insure the Crossley Engine, small Compressor and Petrol Engine, which are inspected by the Insurance Co.'s Engineer and reported upon periodically. Until the V.M. Co. require the use of the Mill, it is an asset to let it for £500 per annum and have it Maintained at Harrison's expense.

#### RODDERUP FELL.

Mine. During 1945, the percentage of Lead Ore per ton in Rodderup Mine, fluctuated considerably and after five years of War, during which no development could be done, owing first to the scarcity of efficient labour and secondly to the necessity of maintaining our financial position at all costs during the war, this was not surprising. In my Report for 1944 I was compelled to state that the immediate outlook for 1945 was not encouraging. Looking back on 1945, I regret having to suggest that what I wrote proved to be correct. The ore continued to drop in value during the first four months of 1945 and on May 18th I received instructions from the General Manager to cease production, to retain only the most reliable men, paying-off all the others, and to continue a small scheme of development only.

These instructions were carried out, and in the latter part of the year the small programme of development was followed in Rodderup Mine by driving levels North of Rodderup Vein, and after driving some distance North, by continuing the Drift more or less parallel to the Vein. The results were not encouraging, but one thing seems to have been proved, viz: that the strata E., and about mid-way between the Incline top and the East End Shaft, has been thrown up for a certain distance, which is yet unknown, and this has apparently upset the mineralisation in the area where work has been carried out.

It is definitely known that the top of the Tynebottom Limestone is about 45 feet below the Horse Level in East End Shaft. It is also definitely known that going West from the Incline Top, the Tynebottom Limestone was rising and that in the X-cut driven North from the Horse Level, East of the West End Shaft, the Limestone which was in the foot of the Incline, down about 25 feet, had risen to the level of the Blackburn Level where the X-cut was driven. Having two definite points it was not unreasonable to assume that the strata rose going West and dipped going East from the X-cut.

In the area where the drives were driven, it was proved that a disturbance has actually occurred, and the strata which, at the foot, of the Incline was dipping East, had risen several feet between the foot of the Incline and the face of the drifts. When bore-holing by Diamond drilling in 1942/43 the core indicated that a disturbance had occurred. We had not discovered the cause of the disturbance when work was temporarily suspended in September, and the men taken out of the mine to repair the top of the East End Shaft, clear the Middle



Level, and repair the water-courses which had been damaged by flooding. The repairs were completed by the end of November. Early in December we decided to commence tunnelling through the "fall" in the old Incline to enable us to get through to the Flatts on the South side of Rodderup Vein.

This work was in progress at the end of 1945. With reasonable luck, the restoration and securing of the old Incline should be completed by the end of January or early February 1946. The completion of this work should enable us to get into the South Flatts at a much earlier date than would have been possible by driving a new Incline further East, and having to install both tramways and Compressed Air and water pipes, which are already present in the old Incline and have been found to be little worse. The driving of a second Incline further East, can be undertaken later if the development record in the South Flatts indicates that it would be advisable. There is a large area of unexplored ground in both places. It must be understood that we have only a small number of men employed, and the prospect of obtaining more efficient labour immediately, is not promising. We are therefore spending as little money as possible, until we have completed all work to the Hydro pipe line etc., and have abundant power and every one ready to proceed with the development programme.

The quantity of ore mined during the year, mainly in the first four months, was 1839 tons. The quantity of concentrates shown as produced monthly was 91.35 tons, but actually the production was 98.4664 Tons, equal to a recovery of 5.354%

The actual production was arrived at when all the concentrates had been sold and despatched, the difference between the monthly production figures and the actual figures is accounted for by

the percentage of moisture being estimated monthly over a long period, and being greater than the actual moisture percentage ascertained after moisture samples had been taken when dispatched.

#### Or Reserves.

With the uncertainty of the position caused by the lack of development over a number of years, it is difficult to estimate the Ore Reserve in Rodderup Mine. I am, however, confident that there is a reasonable prospect of developing payable ore in the area, and if costs are not increased out of all proportion, and with the present price of £39 per ton for Lead, costs of working should still be met even should the grade of ore be comparatively low. It is, however, impossible for me to make a definite statement in the absence of any known data.

#### Programme for 1946.

The programme set out in the General Manager's letter of November 3<sup>rd</sup>., conditional upon the payment to the V.M. Co., of the compensation in respect of the dump materiel treated by N.F.N.D. Ltd., of which £12,000 was received on account on Dec. 11th 1945, will be strictly adhered to, directly more labour is available. The slight diversion of clearing the fall over the old Incline, was, on second consideration, cheaper and quicker than waiting for more labour to drive a new Incline. When an ample supply of labour is available, should the

prospects in the South Flatts indicate that they are likely to prove profitable to work, a new incline can be driven, and even when work is proceeding in the South Flatts, the old Incline can be utilised.

With regard to labour, I must point out that not for some time is it likely that efficient labour in full supply will be available nor does it appear that labour will be cheaper. The high wages paid by N.F.M.D. Ltd., and by other employers in Alston Moor, subsidised by the Government departments concerned with their operations, have all tended to raise the cost of labour and with other amenities, such as transporting the men by motor-lorries and other means, to and from work, labour costs have been forced to an unprecedented high level.

Admittedly, the higher price of £39 per ton for Lead, will help to meet the higher costs, but unless higher efficiency per man per day is obtained, the results will be higher costs for no higher rate of efficiency. With the probability of more Government interference, and with the uncertainty of the labour market at present, the outlook is not reassuring.

### SALES

Lead Ore. During the year, 137.3304 Tons of Lead Concentrates were sold, including the stock of 40.514 Tons on Dec. 31<sup>st</sup> 1944. 98.4664 Tons were produced during the year, and on Dec. 31<sup>st</sup> 1945 there were 1.6500 Tons in stock. The 137.3304 Tons were sold to Messrs. Morris Ashby Limited, Messrs. The British Pyros White Lead Co. Ltd., and Messrs. Walkers Parker & Co. Ltd. The average nett price received at the mine was £17.90 per ton, and the average Lead content was about 81% Pb.

Fluor Spar. Nil

Witherite. Nil

Stone & Chippings. 942 Tons were sold, and realised £381. 12. 6. on site.

### GENERAL.

At the end of 1945, the War position coupled with the uncertainty of what compensation the Company would obtain from N.F.M.D. Ltd, was such that the general position caused us much anxiety. Meeting followed Meeting, and Interviews with government officials were so frequent that it often appeared that the Government was trying to evade payment of any compensation. This uncertainty continued, more or less, until Dec. 19th 1945 when the Government paid the Company £12,000 on account of compensation for dumps, and by doing so admitted the Company's claim based on 6d per ton for dump materiel. They also paid £1500 on account for Royalty due to the Landlords, after deducting Income Tax at 10s/- in the £. The Royalty a/c and the Income Tax deducted there from is a matter for the Landlords, our concern being to know what proportion is due to each. We sent both Landlords a statement prepared by Dr. K. C. Dunham, of the Geological Survey Dept. of H.M. Government, showing what the proportions should be. Up to date Lord Allendale has agreed to this proportioning, but we have not received the agreement of the Admiralty.

Of the amount now credited to the Company's accounts at Martins Bank Ltd., £1000 of the £1500 must be paid out to the Landlords. The Company is entitled

to retain £500 of the account due to Greenwich Hospital Estates, which was promised to the Company from the first payment of Royalty received from N.F.M.D. Ltd. in respect of concentrates recovered from the dumps. At an early opportunity, we shall ask Lord Allendale to assist the Company, by subscribing some portion of his share, to help carry out the development programme in Nentsbury.

All statements have now been sent to the Ministry of Supply for amounts due to the end of 1945 and copies have been sent to Head Office, Mons. Chaplain and the Landlords.

I am consulting Messrs. Blackburn & Main (Mr. MacPhail) re: our presenting a claim for interest at the rate of 2% per annum on the amounts overdue to the Company, up to the end of September 1945, and, if not paid within three months of the month in question, the amounts due in respect of October and November tonnages of dump material treated by N.F.M.D.

On Dec. 31st 1945, the cash position of the V.M. Co. at Martina Bank Ltd.

Alston, was as follows: -

|                               |                    |                      |
|-------------------------------|--------------------|----------------------|
| Credit in                     | No.1 (Currant) A/c | £3124. 0. 7.         |
| “ “                           | No.2 (Deposit) A/c | <u>£15154. 4. 0.</u> |
| A total Credit Balance of.... |                    | <u>£18278. 4. 7.</u> |

Aa stated previously, £1000 of the above sum will have to be paid to the Landlords. The Company is however due rent for Rampgill Building at £200 per annum from July 26th 1942 to the end of 1945, and as explained on Page 2 of this report, a cheque for £697. 2. 5. in respect of £12. 12. 0. expenses and rent to Dec. 25th 1945 has been received since Dec. 31st. 1945

I consider the prospects for 1946 are rather more promising than when I wrote my 1944 Report. The future will however depend upon what success we meet in developing both mines. A reasonable labour supply, with an average recovery of from 8 to 10%, would show a profit, but until more is known about the future control of Non-Ferrous mining in England, it would be wise and in the Company's interest to consider, should a profit become available, to continue developing the mines rather than paying Income Tax at 10s/- in the £. as at present, or 9s/- in the £. after April 5th 1946.

Before closing this report, I wish to place on record the retirement of Mr. Wm. Rutherford, who, for many years, had served the Company faithfully as Washing Master at Nentsbury, and from 1939 until his retirement in May 1945, in the General Office of the Company. Mr. Rutherford was a man of honour and integrity, and faithful in everything he undertook. He was 75 years of age when he retired.

Once more, I have to express with gratitude the help received during the year from Mr. Hallett and Mr. MacPhail, Senior Partner of Messrs. Blackburn & Main, of Carlisle, the Company's solicitors for a considerable number of years, and to the Staff here as a whole, who have served the Company faithfully during one of the moat trying years of my existence in Nenthead.

Nenthead.

29th Jan. 1946.

## Report on the Nenthead Mines January 1946

### R E P O R T

@@@@@@@@@@@@

on the

N E N T H E A D    M I N E S  
@@@@@@@@@@@@@@@@    @@@@@@@@@@

J A N U A R Y    1 9 4 6.  
@@@@@@@@@@@@    @@@@@@@@

|                  | <u>Nentsbury.</u>              | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|------------------|--------------------------------|------------------|------------------|----------------|
| Ore Mined        | Main level                     | Occupied         | Nil              | Nil.           |
| Ore Milled       | kept in<br>good condi<br>tion. | by<br>N.F.M.D.   | "                | "              |
| Pb. Concs. Rcvd. |                                |                  | "                | "              |
| % of Recovery    |                                |                  | "                | "              |
| Hours worked     |                                |                  | "                | "              |
| Tons per hour    |                                |                  | "                | "              |
| Tons in stock    |                                |                  | "                | "              |

### STOCKS.

|           | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------|-------------------|------------------|------------------|----------------|
| Crude Ore | Nil               | Nil              | 2500 Tons        | 2500 Tons.     |

Galena, in stock.....1.65 Tons

Witherite in stock..... Nil.

Fluor Spar " " ..... Nil.

Compressed Air produced at Nenthead, Nil.

Compressed Air produced at Rodderup, by Electrical Energy, about 300 cubic feet per minute, for 16 hours daily, and at a pressure of 80 lbs. per square inch, used wholly for pumping. Owing to the breakage of some of the old concrete pipes conveying water to the Hydro Compressor, this plant was idle for most of the month. We had difficulty in procuring new pipes, and the frosty weather, with snow, prevented us for several days after we had obtained pipes, from cementing the joints. At the end of the month the pipe-line was completed and the Hydro-Compressor has worked satisfactorily since. In the meantime, the water rose throughout the mines to the level of the South Flatts and above.

## **NENTHEAD MINES JANUARY 1946**

NENTSBURY MINE. The main level has been inspected weekly and other parts of the mine periodically. Repairs have been carried out and the mine generally has been kept in good condition.

The Cross-cut from the main Level to the Winze, which we propose to pump out for the Diamond Drilling programme, was found to be in good order, except that the small wooden headgear, over the Winze, was in a rotten condition and must be replaced by a new one which can be made by our joiner. From the Winze, we hope to explore for Veins in the locality, in the Quarry Hazle stratum, and, if the results there are encouraging, in the Four Fathom Limestone, and also, I would suggest, in the Nattrass Gill Hazle, which would mean sinking the Winze 70 to 80 feet or bore-holing to get through these strata. As previously stated in a letter sent to Head Office and to Mons. Chaplain, our first job is to repair the 12" pipe-line from Perry Dam to Smallcleugh Pelton Wheel and the Compressor driven by the Pelton Wheel. After much correspondence with Messrs. Brown Paterson & Co., of Newcastle, and the Government Disposal Board, we expect we have purchased the necessary pipes which were inspected by our Engineer and found to be quite satisfactory. A permit to purchase these has been granted by the Government, and sent to London. We have also offered to purchase 1000 ft. of 6" diam. pipes to repair the Compressed Air pipe-line, and these we expect to obtain. The Government prices for these two sizes of pipes, which our Engineer stated were equal to new, is only about 50% of what several merchants asked for similar second hand pipes. We expect to hear early in February that the Government Disposal Board have accepted our offer. The delays in getting material is worrying but we cannot do anything in the matter to expedite it. Government departments are very slow in replying to correspondence, and as they have control we have no alternative but to wait their time. Immediately we received the pipes we shall lose no time in laying them in position.

MILL. Operated and maintained by Jas. H. Harrison. The rent for 1945 has been paid.

RODDERUP MINE. During January, all the miners were employed in tunnelling through the fall in the Old Incline. The tunnelling was completed except for cleaning up a small amount of debris at the foot of the Incline leading down to the South Flatts, which could not be done until the water was lowered. The rising of the water in January was due to the breaking of some old concrete pipes on the Hydro-Compressor line. Immediately the concrete pipes collapsed, we tried, by writing several firms, and telephoning to merchants, to obtain either Steel or new Concrete pipes to repair the damage, but were unsuccessful for at least two weeks. Eventually we obtained new 15" diam. concrete pipes from N.F.M.D., who, before selling them, had to obtain permission from London. After permission was granted, a heavy fall of snow and severe frost prevented us from getting up the fell with the pipes, and even had we been able to get up, the severe frost would not have permitted us to use concrete for the joints. Not until the end of January were we able to get the pipes in position and cement the joints by using rapid-hardening cement. Since the work was completed, the

Hydro has worked satisfactorily and the water in the mine is being gradually lowered. During January, we used the mechanical compressor to pump as much water as possible but only for 16 hours daily, which meant employing two men and paying for electrical energy, which is expensive. The Hydro-Compressor operates 24 hours daily and the only cost is the daily inspection of the pipe-line by one man. We have also obtained a supply of concrete pipes to be held in reserve. The cost per foot of the new concrete pipes was 4s/8d, while the cost of second hand steel pipes varied from 15s/- to 20s/- per foot, plus transport by road and rail.

If all goes well, we should be able to get down to the South Flatts by mid-February, when the faces of the Flatts will first be washed of all sediment left by the accumulation of water in the Flatts since 1930. This is not an expensive nor serious matter, as before the Hydro failed, the mine foreman was in the Flatts and saw no serious accumulation of debris or silt. Directly the water is lowered I shall personally inspect the Flatts and give close attention to the places marked on the plan where mineral was exposed.

MILL. In good order.

SALES.

Lead Ore. None sold, and there is still 1.65 Tons in stock.

Gravel. Only 23 tons sold owing to bad weather and a breakdown in transport. We have orders for 30/40 tons weekly now in hand.

GENERAL. As previously reported by letter to Head Office we received payment during January of £697. 2. 5., rent for Rampgill Mill from July 26th 1942 to December 25th 1945. By making this payment, the Government have acknowledged the Company's claim for £200 per annum rent, and so long as their machinery is in the building, the rent, I presume, will continue to be paid at quarterly intervals. Neither the Mill nor the ground requisitioned by the Government, has yet been de-requisitioned.

# Report on the Nenthead Mines February 1946

## REPORT \*\*\*\*\*

on the

NENTHEAD MINES  
\*\*\*\*\*

FEBRUARY 1946.  
\*\*\*\*\*

|                          | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------------|-------------------|------------------|------------------|----------------|
| Ore Mined                | Main Level and    | <del>Xxx.</del>  | Nil.             | Nil.           |
| Ore Milled               | other parts of    | Occupied         | Nil.             | Nil.           |
| Pb. Concs. Prdcd.        | the mine kept     | by NFMD.         | "                | "              |
| % of Recovery            | in good condi-    |                  | "                | "              |
| Hours worked             | tion.             |                  | "                | "              |
| per hour                 |                   |                  | "                | "              |
| Tons <del>xx xxkxk</del> |                   |                  | "                | "              |
| Tons in stock            |                   |                  | "                | "              |

## STOCKS.

|           | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u><del>Wellhope.</del></u> | <u>Totals.</u> |
|-----------|-------------------|------------------|-----------------------------|----------------|
| Crude Ore | Nil.              | Nil.             | 2500 Tons                   | 2500 Tons      |

Galena, in stock at Rodderup, 1. 65 Tons

Witherite, in stock Nil.

Fluor Spar, in stock Nil.

Compressed Air produced at Nenthead, Nil.

Compressed Air produced at Rodderup by Water Power and Electrical energy about 400 to 500 cu. ft. per min. at a pressure of 80 lbs per sq. inch. The Water pipeline from Greencastle Reservoir to Rodderup Shaft was repaired and the Hydro-Compressor worked 24 hours daily, giving satisfactory results during the month. Most of the Compressed Air was used for pumping out the water from the West End area of the Flatts. A small amount was used for working Rock Drills.

## **NENTHEAD MINES FEBRUARY 1946**

NENTSBURY MINE. The Main Level and most of the mine was inspected during the month. Some repairs were done in the main level, but generally the mine was in good condition.

As previously reported, we are unable to do any prospecting work in the mine until the main water pipe line is repaired, which must be completed before the 6" diam. air line from Nenthead to Wellhope can be tested and repaired if necessary. After six weeks delay in obtaining the 12" diam. internal diam. pipes, these were at last delivered to Nenthead on the 19th Feb. With difficulty we got these pipes part way up the hill to the site, but owing to severe frost and snow, we were unable to get all the pipes up. We commenced removing some of the worn pipes and replacing them with new, when work was stopped by another heavy fall of snow, with severe frost. The unfortunate situation of the pipe-line, roughly from 540 to 615 metres above sea-level and exposed to all kinds of weather, prevents us carrying out daily or even weekly repairs in Winter. The rough weather continued to the end of the month and is likely to last for some time. Once we can get Compressed Air into the mine at 80 lbs pressure, we can commence pumping the water out of the Winze. We have both pump and hoses waiting to connect up as soon as Compressed Air is available.

MILL. Operated and maintained by Jas. H. Harrison.

RODDERUP MINE. During February, the Hydro-Compressor was in operation 24 hours daily and gave satisfactory results. Pumping the water from the West End Flatts continued night and day, and on Febr. 18th a second jet blower was installed in the West End Shaft. The water was lowered below the level of the South Flatts in the West End area but as this part of the mine had been flooded for 15 years, and with a fall in the Middle Level preventing circulation, the air was so bad that lamps would not keep alight, and miners could only work for a short time. It was possible to get down in the first two small Flatts on the South Side of the Vein, but our object is to get down to the main Flatts which extend West as shown on the plan, where in 1930 mineral was exposed in three places. By the end of the month circulation of air had improved somewhat, but until the fall in the middle level - which is not large - is cleared full circulation of air and good ventilation will not be obtained, and neither can we get the large wagons direct from the Blackburn Level down to the working places in the South Flatts. In January report, I anticipated that we would get down in the South Flatts about mid-February. Actually, we got down in the Flatts by the third week in February, but foul air prevented us getting into the main Western Flatts of the area. As previously explained, the foul air, which we did not expect, was caused by the choking of a Rise from the middle level to the Blackburn Level, due to the rotting of the Timber releasing a quantity of "deads" which had been stored in the Rise, thus preventing circulation of air with another rise which is open further West and where the Foreman, having been down it, found the ventilation satisfactory.



When the fall has been cleared, there should be no complaint re: ventilation. The next thing to do will be to clear the Flatts of the mud accumulated while they have been submerged, and then to widen the tram-road from 20" to 24" to enable the horse-wagons to go down into the Flatts. The gauge of the tram-road in the Blackburn Level is 24", but years ago, all tram-roads in the workings were 20". In the past, the ore from these Flatts was sent down to the 20 Fathom Level and then hoisted up the West End Shaft. When the Incline was completed in 1931 after the mine was closed in 1930, it was decided to concentrate all work in the North Flatts, which are 20 feet higher than the South Flatts, and from these the ore was pulled up the Incline and went direct to the Mill, thus eliminating all tramming in the 20 Fathom Level and hoisting up the West End Shaft. Once the South Flatts are cleared of mud, if payable ore is found, the ore will be filled in the Flatts and go direct up the Incline and to the Mill. I have been down the Flatts on the South Side as far as it was possible to go but was unable to make a thorough inspection owing to the Fall in the middle level and the bad air ventilation.

MILL. In good order.

SALES.

Lead Ore. None sold, 1.65 tons in stock.

Gravel. During the month, 172.05 Tons of Gravel were sold, at from 4s/6d to 5s/6d per ton.

GENERAL. I have nothing to report under this heading, except that the Auditors, Messrs. Greaves & Co., of Newcastle-on-Tyne, visited Nenthead during the month to audit and inspect the accounts, and a copy of the Balance Sheet and Profit & Loss A/c for 1945 prepared by and signed by them, was posted to Head Office on February 27th. Since then we have received a statement and letter, on March 2nd, from N.F.M.D. revising their tonnage of dump material treated, and copies of these and our reply were posted to Head Office on March 4th. We are now awaiting instructions from Head Office as to how the matter has to be dealt with in regard to the Balance Sheet, and we have asked Messrs. Greaves & Co. to withhold submission of the Balance Sheet to H.M. Inspector of Taxes, until the position is clarified, providing they have not already submitted it.

# Report on the Nenthead Mines March 1946

## REPORT @@@@@@@@@@@@@@@@

on the

NENTHEAD MINES  
@@@@@@@@@@@@@@@@ @@@@@@@@@@  
MARCH 1946.  
@@@@@@@@ @@@@@@

---

|                 | <u>Nentsbury.</u>     | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|-----------------|-----------------------|------------------|------------------|----------------|
| Ore Mined       | Main Level            | Occupied         | Nil.             | Nil.           |
| Ore Milled      | in fair<br>condition. | by<br>N.F.M.D.   | "                | "              |
| Pb.Concs.pracd. |                       |                  | "                | "              |
| Hours worked    |                       |                  | "                | "              |
| Tons per hour   |                       |                  | "                | "              |
| Tons in stock   |                       |                  | "                | "              |

---

### STOCKS.

|                                                 | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-------------------------------------------------|-------------------|------------------|------------------|----------------|
| Crude Ore                                       | Nil.              | Nil.             | 2500 Tons        | 2500 Tons.     |
| <u>Galena</u> in stock at Rodderup....1.65 Tons |                   |                  |                  |                |
| <u>Witherite</u> , in stock ..... Nil.          |                   |                  |                  |                |
| <u>Fluor Spar</u> , " " ..... Nil.              |                   |                  |                  |                |

---

Compressed Air produced at Nenthead, Nil.

Compressed Air produced at Rodderup, by Water Power and Electrical  
Energy, from 400 to 500 cu.  
feet per minute, at a working pressure of 80 to 85 lbs per sq. inch.

---

## **NENTHEAD MINES**

### **MARCH 1946**

NENTSBURY MINE. Main level and most of the mine levels in good condition.

MILL. Operated and maintained by Jas. H. Harrison. Inspected periodically by representatives of the V.M. Co.

NENTHEAD. By the end of March the main 12" water pipe-line was tested to full pressure.

A few pipes, one metre below ground, failed to withstand the test. These were removed directly the weather permitted, and replaced by new ones. The line will be tested again at full pressure early in April, after which the 6" diam. Compressed Air pipe-line from Nenthead to Wellhope Shaft will be tested. I anticipate that several of the pipes will have to be replaced. We have 1000 feet ready to repair this line.

RODDERUP MINE. Arrangements were completed by the end of March to break ore from point No. 9. in the Western Flat area of the Mine, north side of the Vein, and to commence milling on a small scale on April 1st. Work in this area is purely prospecting, and must be regarded as such, because we have no blocks of ore in reserve where the value in percentage of Lead Ore per ton is known. The results from Mill recovery, when known, will indicate the value. The Hydro-compressor has operated 24 hours daily, for seven days weekly, and gave satisfactory results. The water has now been pumped out to a depth of 5 metres below the North Flatts.

MILL. After being idle several months, the mill was cleaned during the last week in March, and the machinery put in operation, preparatory to commencing to run on April 1st. Except for some choked pipes which had to be replaced, the mill was found to be in fair condition.

#### SALES.

Lead Ore. None sold.

Gravel. During the month 131.80 Tons was sold.

GENERAL. N.F.N.D. Further correspondence, copies of which have been sent to Head Office, passed between Mr. W. C. C. Rose, at the London Office of N.F.M.D. Ltd., and the V.M. Co., with regard to the revision of dump tonnage presented by N.F.M.D. I have arranged for an interview with Mr. MacPhail, of Messrs. Blackburn & Main, the V.M. Solicitors, on April 5th to discuss this matter further, as we do not intend to accept the reduction of over 50,000 tons on the original figures given us, without the strongest objections.

A cheque in respect of the rent of Rampgill Mill for the three months Dec. 26th 1945 to March 25th 1946, amounting to £50, was received during the month. There is as yet no indication that the requisitioned property will be released at an early date.

## Report of the Nenthead Mines April 1946

| REPORT<br>of the<br>NENTHEAD MINES<br>APRIL 1946.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                      |                      |                  |                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|----------------------|------------------|----------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <u>Nentsbury.</u>    | <u>Rampgill.</u>     | <u>Rodderup.</u> | <u>Totals.</u> |
| Ore Mined                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Nil.                 | Occupied by N.F.M.D. | 260 Tons         | 260 Tons.      |
| Ore Milled                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Main level inspected |                      | 260 "            | 260 "          |
| Pb. Concs. prdcd. and repaired                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                      | 12.50 "          | 12.50 "        |
| Hours worked                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                      |                      | 59 hrs.          | 59 hrs.        |
| Tons per hour                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                      |                      | 4.808 Tons       | 4.808 Tons     |
| Tons in stock                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                      |                      | Nil              | Nil            |
| STOCKS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                      |                      |                  |                |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <u>Nentsbury.</u>    | <u>Rodderup.</u>     | <u>Wellhope.</u> | <u>Total.</u>  |
| Crude Ore                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Nil.                 | Nil.                 | 2500 Tons        | 2500 Tons.     |
| <u>Galena</u> , in stock at Rodderup, 14.15 Tons                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                      |                      |                  |                |
| <u>Witherite</u> , in stock,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                      |                      | Nil.             |                |
| <u>Fluor Spar</u> , in stock,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                      |                      | Nil.             |                |
| <u>Compressed Air</u> , produced at Nenthead, by water power, a small quantity for testing air pipe-lines.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                      |                      |                  |                |
| <u>Compressed Air</u> , produced at Rodderup, by water power and electrical energy, from 200 cu.ft. to 500 cu.ft. at a pressure of 80/85 lbs. per square inch. <u>Note</u> : During the month, one of the mechanical compressors developed valve trouble and was idle 4 days, and the other <del>compressor</del> developed trouble in the mechanical 'cut-out' for 3 days before a new one could be obtained. At the end of the month, both were in good condition, one only being worked, which, with the air produced by water power, will give, if required, up to 700 cu.ft. per minute. Pressure per square inch is being raised to 90 lbs from May 1st. |                      |                      |                  |                |

## **NENTHEAD MINES**

### **APRIL 1946**

NENTSBURY MINE. Except for a small fall in one place, Nentsbury Main Level is in good condition. All available labour is employed repairing the 6 inch diam. Compressed Air pipe-lines, while the weather is favourable.

MILL. Operated and repaired by Jas. H. Harrison. Rent has been paid to March 31st 1946.

NENTHEAD. During the month, the 6" diam. Compressed Air pipe-line, from Brewery Shaft to Guddamgill, was found defective and unable to withstand a pressure exceeding 50 lbs per square inch, with serious losses in quantity at different points.

To make the position clear, this pipe-line was laid by the V.M. Co. upwards of 40 years ago, and during the past 20 years old pipes which have failed have been replaced by new, but since the water-supply was taken over by N.F.M.D. no Compressed Air was produced and passed through the line, which deteriorated as a consequence.

The pipes from Guddamgill to Wellhope, were new, when laid in 1929, and are in good condition. We are restoring the line from Brewery to Guddamgill with new pipes and the best of the old pipes, after acetylene welding those only slightly defective. We are pushing ahead with the work, and are engaging any efficient men, willing to work in either Nentsbury Mine or on the surface as required, to assist with this work.

RODDERUP MINE. I can add nothing in this report with regard to Rodderup, to what I have already given in my Weekly Reports, particularly that for the 8 days ending April 30th 1946. The result for the month is not estimated to show a loss, but has left me rather disappointed as I anticipated we would have better results.

MILL. In fair running condition.

#### SALES.

Lead Ore: None sold.

Gravel. 125.25 tons sold for a net profit of £33.75

GENERAL. N.F.M.D. Copies of all correspondence in connection with this firm and V.M. Co. and in regard to all other matters, have been sent to Head Office during the month. We shall continue to send copies promptly of all important correspondence.

A cheque for £125. in respect of the rent due for Nentsbury Mill up to March 31st 1946, has been received from Messrs. Jas. H. Harrison.

Rodderup Mine

West Flats.

T. Jackson & Partners.

152 days worked.

| <u>Flat.</u> | <u>L</u> | <u>W</u> | <u>S.F.</u> | <u>S.M.</u> | <u>H</u> | <u>C.F.</u> | <u>C.M.</u> |
|--------------|----------|----------|-------------|-------------|----------|-------------|-------------|
| West         | 7 x      | 8 -      | 56 -        | 5.20 x      | 13 -     | 728 -       | 20.61       |
| South        | 9 x      | 9 -      | 81 -        | 7.52 x      | 13 -     | 1053 -      | 29.82       |
| North        | 9 x      | 9 -      | 81 -        | 7.52 x      | 9 -      | 729 -       | 20.64       |
| West         | 16 x     | 10 -     | 160 -       | 14.86 x     | 9 -      | 1440 -      | 40.77       |

3950 - 111.84 @ Days wages.

Tons to Mill:- 260.

Wages paid: £112. 1. 10.

Cost per Cu.M.:- 20/-

April 1946.

19+10.

[illegible]

## COMPARATIVE STATEMENT.

✠.....Nentsbury .....✠..... Rodderup .....✠

|           |      |                |      |
|-----------|------|----------------|------|
| Nentsbury | .... | Tons in Dead's | .... |
| Rodderup  | ...  | Tons in Dead's | .... |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Mos Av  
Mos Av

| MONTH     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               |              |               |
| February  |              |               |              |               |
| March     |              |               |              |               |
| April     |              |               | 112          | £0/-          |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report on the Nenthead Mines May 1946

### REPORT

@@@@@@@@@@@@

on the

### NENTHEAD MINES.

@@@@@@@@@@@@@@@@ @@@@@@@@@@

MAY 1946.

@@@@ @@@@@

---

|                   | <u>Nentsbury.</u>            | <u>Rampgill.</u>        | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|------------------------------|-------------------------|------------------|----------------|
| Ore Mined         | Nil.                         | Occupied<br>by N.F.M.D. | 225 Tons         | 225 Tons       |
| Ore Milled        | Main level<br>inspected      |                         | 225 "            | 225 "          |
| Pb. Concs. prdcd. | and some<br>repairs<br>done. |                         | 10.10 "          | 10.10 "        |
| Hours worked      |                              |                         | 47 hrs.          | 47 hrs.        |
| Tons per hour     |                              |                         | 4.67 Tons        | 4.67 Tons      |
| Tons in stock     |                              |                         | Nil.             | Nil.           |

---

### STOCKS.

|                                     | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-------------------------------------|-------------------|------------------|------------------|----------------|
| Crude Ore                           | Nil.              | Nil.             | 2500 Tons        | 2500 Tons.     |
| <u>Galena</u> in stock at Rodderup, |                   |                  | 24.25 Tons       |                |
| <u>Witherite</u> ,                  |                   |                  | Nil.             |                |
| <u>Fluor Spar</u>                   |                   |                  | Nil.             |                |

---

Compressed Air, produced at Nenthead, a small quantity by water power for testing air pipe-line.

Compressed Air, produced at Rodderup, by water power and electrical energy, about 500 c.ft. per minute at a pressure of 85-90 lbs per square inch, at the working face. It has been raised to try to get higher efficiency from the rock-drills.

---



## **NENTHEAD MINES MAY 1946**

NENTSBURY MINE. The main level is in good condition except for a small fall in one place, which will be repaired immediately after the 6 inch pipe-line is completed.

MILL. Operated and repaired by Jas. H. Harrison.

NENTHEAD. Work is continuing on the 6 inch pipe-line for carrying Compressed Air from Brewery Shaft to Guddamgill. After repairing pipes here and there, where breakages could be detected, above ground, it was found that many of the pipes, some 2 metres below ground, were defective and as a consequence leakages could not be detected above ground. we therefore decided to lift the whole length from Gillgill, about mid-way between Brewery Shaft and Guddamgill Shaft, and are replacing this with 6 inch pipes removed from outside Rodderup Mine and some from Nentsbury main level to Gin Shaft and level going into Scraith hole mine. We have about 700 metres more to lay. This work has taken longer than I anticipated, first, because we found more pipes defective than we expected, and second, because of our inability to obtain sufficient labour. Without Compressed Air, we can do no prospecting at Nentsbury.

RODDERUP MINE. Rodderup results are lower due mainly to less labour - one rock drill miner left our employ and one labourer was ill most of the month. All labour possible is migrating to the Midlands of England, where the Government rates of pay are higher. Most of the young men demobilised from the services, are not keen to work in mines and prefer, either to leave the district or, preferably, if possible, go to a British Colony overseas. There are prospects of our getting an additional labourer for Rodderup Mine in June, but until the man comes to work nothing is certain. For April I gave estimated figures for costs at Rodderup, not including administration. The estimated amount for costs was given as £458.

The actual costs of labour stores, carting, electricity, and various, amounted to £361. 3. 9. and the estimated cost of royalty, insurances and rates, and Taxes, £58., making a total of £419. 3. 9. The actual figures of costs for May have not been arrived at yet. I estimate that there will not be much difference in the costs. The quantity of Lead Concentrates produced is less by 2.40 tons, and consequently unless the price of Lead is increased in this country, as seems probable from the Press, there will be a small loss for May based on the above calculations. Six additional miners, would enable us to almost double the output, and we would meet all costs without difficulty.

MILL. In fair running condition.

### SALES.

Lead Ore. None despatched. We have orders for one ton for Messrs. Morris Ashby Ltd., and a permit to despatch, as soon as Messrs. Ashby supply us with the drums. Messrs. British Pyros White Lead Co. have not yet been able to get a permit to purchase. Directly they can get a permit we can despatch to them.

Gravel. Only 16.25 Tons was sold, value £4. 14. 6.

GENERAL. Copies of correspondence between us and N.F.M.D. in London have been sent to Head Office.

Termination of Leases. As requested by Head Office, we have taken up this matter with Messrs. Blackburn & Main, who will prepare a letter to be sent to Greenwich Hospital which letter they will send to Nenthead for me to see before posting it. In the first letter, I suggested that we should ask G.H. to clarify the statement re: protecting shafts, etc., indefinitely. Legally, it seems, they can only ask the V.M. Co. to maintain shafts etc., for a period of years and not for an indefinite period. This clause applies, apparently, only to the Rodderup Fell Mine Lease.

It does not seem to apply to the Nenthead Lease, where the period of responsibility is for three years after twelve months has been allowed for crushing and washing. The lease for the Lord Allendale Concession in Nentsbury Mine, seems to be determinable by giving six months' notice each third year of the term for which the lease was granted, and while it has not been confirmed yet by our Solicitors, I consider the V.M. Co. can give six months' notice to terminate the lease on January 1st 1948, by giving the notice before July 1st 1947. The Solicitors are considering this matter at present, and I expect to hear from them within a few days.

Rodderup Fell Mine Statistics - May 1946.

W e s tF l a t s.

T. Jackson & Partners.157½ days worked.

Flat.

|          | L       | W | S.F. | S.M. | H.         | C.F.        | C.M.                       |
|----------|---------|---|------|------|------------|-------------|----------------------------|
| No.1 S.  | 20 x 12 | - | 240  | -    | 22.30 x 13 | -           | 3120 - 88.34               |
| " 3 W.   | 3 x 11  | - | 33   | -    | 3.06 x 8   | -           | 264 - 7.47                 |
| " " Side | 18 x 10 | - | 180  | -    | 16.72 x 8  | -           | <u>1440</u> - <u>41.77</u> |
|          |         |   |      |      |            | <u>4824</u> | <u>-136.58</u>             |

Tonnage to Mill:- 225

Wages Paid: £116: 1: 6.Cost per Cu.M.:- 17s/-

# MINE STATISTICS

May 1914.

|           | Tons of Ore Mined |     |       | Cubic Metres Cut |          |       | Tons per Cubic Metre |          |       | Days Worked |          |       |        |          |       | Tons per Miner's Day |          |       | Cubic Metres per Miner's Day |          |       | Per Under-ground Man |          |       | Wages paid per Miner's Day |       |           | Wages paid per Underground Man |           |       | Wages paid per Cubic Metre |         | No of Drills Working |  | Dynamite |  |
|-----------|-------------------|-----|-------|------------------|----------|-------|----------------------|----------|-------|-------------|----------|-------|--------|----------|-------|----------------------|----------|-------|------------------------------|----------|-------|----------------------|----------|-------|----------------------------|-------|-----------|--------------------------------|-----------|-------|----------------------------|---------|----------------------|--|----------|--|
|           |                   |     |       |                  |          |       |                      |          |       |             |          |       |        |          |       |                      |          |       |                              |          |       |                      |          |       |                            |       |           |                                |           |       |                            |         |                      |  |          |  |
|           |                   |     |       |                  |          |       |                      |          |       |             |          |       |        |          |       |                      |          |       |                              |          |       |                      |          |       |                            |       |           |                                |           |       |                            |         |                      |  |          |  |
|           | Headings          | Dev | Total | In Ore           | In Deads | Total | In Ore               | In Deads | Total | In Ore      | In Deads | Total | In Ore | In Deads | Total | In Ore               | In Deads | Total | In Ore                       | In Deads | Total | In Ore               | In Deads | Total | Head-ings                  | Total | Head-ings | Total                          | Head-ings | Total | lbs.                       | per ton |                      |  |          |  |
| Nantsbury |                   |     |       |                  |          |       |                      |          |       |             |          |       |        |          |       |                      |          |       |                              |          |       |                      |          |       |                            |       |           |                                |           |       |                            |         |                      |  |          |  |
| — Mos Av  |                   |     |       |                  |          |       |                      |          |       |             |          |       |        |          |       |                      |          |       |                              |          |       |                      |          |       |                            |       |           |                                |           |       |                            |         |                      |  |          |  |
| — Mos Av  |                   |     |       |                  |          |       |                      |          |       |             |          |       |        |          |       |                      |          |       |                              |          |       |                      |          |       |                            |       |           |                                |           |       |                            |         |                      |  |          |  |
| Rodderup  | 225               | -   | 225   | 131              | -        | 131   | 1-05                 | -        | 1-05  | 124         | -        | 124   | 157    | -        | 157   | 1-45                 | 1-09     | 1-09  | 1-45                         | 0-51     | 1-41  | -                    | 1-41     | 1-41  | 1-41                       | 1-41  | 1-41      | 1-41                           | 1-41      | 1-41  | 1-41                       | 1-41    | 1-41                 |  |          |  |
| 1 Mos Av  | 200               | -   | 200   | 112              | -        | 112   | 2-32                 | -        | 2-32  | 110         | -        | 110   | 152    | -        | 152   | 2-24                 | 0-48     | 0-48  | 2-24                         | 0-71     | 1-41  | -                    | 1-41     | 1-41  | 1-41                       | 1-41  | 1-41      | 1-41                           | 1-41      | 1-41  | 1-41                       | 1-41    | 1-41                 |  |          |  |
| 2 Mos Av  | 242               | -   | 242   | 124              | -        | 124   | 1-95                 | -        | 1-95  | 120         | -        | 120   | 154    | -        | 154   | 2-00                 | 1-03     | 1-03  | 2-00                         | 0-80     | 1-41  | -                    | 1-41     | 1-41  | 1-41                       | 1-41  | 1-41      | 1-41                           | 1-41      | 1-41  | 1-41                       | 1-41    | 1-41                 |  |          |  |

## COMPARATIVE STATEMENT.

Nentsbury ..... Tons in Deads ....  
 Rodderup ..... Tons in Deads ....

Wages paid per Cubic Metre in Readings as suggested in your letter of 2nd June 1912.

Nentsbury

|        |  |
|--------|--|
| Mos Av |  |
| Mos Av |  |

| MONTH     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               |              |               |
| February  |              |               |              |               |
| March     |              |               |              |               |
| April     |              |               |              |               |
| May       |              |               |              |               |
| June      |              |               |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report on the Nenthead Mines June 1946

### REPORT

\*\*\*\*\*

on the

NENTHEAD MINES.

\*\*\*\*\*

JUNE 1946.

\*\*\*\*\*

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------|------------------|------------------|----------------|
| Ore Mined         | Main level        | Occupied         | 150 Tons         | 150 Tons       |
| Ore Milled        | in good           | by               | 150 "            | 150 "          |
|                   | condition.        | N.F.M.D.         |                  |                |
| Pb. Concs. prdcd. |                   |                  | 5.40 "           | 5.40 "         |
| Hours worked      |                   |                  | 32 hrs.          | 32 hrs.        |
| Tons per hour     |                   |                  | 4.69 Tons        | 4.69 Tons      |
| Tons in stock     |                   |                  | Nil.             | Nil.           |

### STOCKS.

|           | <u>Nentsbury.</u>                  | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------|------------------------------------|------------------|------------------|----------------|
| Crude Ore | Nil.                               | Nil.             | 2500 Tons        | 2500 Tons      |
|           | <u>Galena</u> in stock at Rodderup |                  | 15.70 Tons       |                |
|           | <u>Witherite</u>                   |                  | Nil.             |                |
|           | <u>Fluor Spar</u>                  |                  | Nil.             |                |

Compressed Air produced at Nenthead. At the end of June, sufficient Compressed Air at 90 lbs. per sq. inch pressure at Nenthead and 83 lbs pressure in Nentsbury Mine, was produced by water power to carry out pumping, hoisting and drilling in the Winze in Nentsbury Mine. The quantity produced was about 600 cu. ft. per minute at Nenthead.

Compressed Air produced at Rodderup by water power and electricity, amounted to about 500 cu.ft. per minute, at a pressure of 85 lbs per sq. inch at the working places in No. 9 point.

## **NENTHEAD MINES**

### **JUNE 1946**

NENTSBURY MINE. The main level was repaired and by the end of the month, the 6 inch diameter pipe-line from Nenthead carrying Compressed Air to Nentsbury was completed. The pressure in the mine was 83 lbs per sq. inch. The replacing of one mile of the pipe-line, occupied more time than we anticipated, but it is now in good order. Pumping will commence in the Winze early in July, and prospecting by drilling will begin about mid-July, after we have inspected the strata in the Winze and have ascertained what the probable position of the veins is, Cox and Treloar Veins first, and then Dupont.

RODDERUP MINE. June month was a poor one, caused by a national holiday on June 8th and 10th, and the Annual Week's holiday from June 24th to 29th inclusive. At Point 9, the ore dropped in grade, and the outlook at this point deteriorated. After giving the matter careful consideration, we recommended prospecting in the South Flatts near the foot of the Incline, and having received the approval of Head Office, arrangements were made to clear the debris from points "A" and "B", and preparations made to commence work early in July. Prospecting in this area will reduce transport costs. All broken rock and/or ore will be filled direct in the wagons which will be drawn up the Incline and either taken to a waste heap outside or, if payable, stored for milling later. The nature of the work at points "A" and "B" is purely prospective, there being no payable ore in sight. There are traces of Galena, and, as the ore on the North Side of Rodderup Vein was payable and even profitable in today's price of Lead, we can only hope that we may cut payable ore on the South side.

MILL. In good condition. When cleaning the Mill, there may be a further small quantity of Slime Concentrates produced. If so, it will be included in the production, but there will be no need to add any to the June output, even although, if added, the percentage recovery would be slightly increased.

#### SALES.

Lead Ore. 13.95 Tons were despatched during the month, but there may be some adjustment when the percentage of moisture is ascertained.

Gravel. None sold during the month, but the larger size gravel has been all sold for delivery during July.

GENERAL. Copies of all correspondence and results of interviews re: termination of Leases have been sent to Head Office. The Company's solicitors, Messrs. Blackburn & Main, have this matter in hand. Final payment for dump material treated by N.F.M.D., has not been received yet, and copies of all correspondence relating thereto have been sent to Head office. At the end of June, I instructed Messrs. Blackburn & Main to demand payment in full for the amount we consider due to the Company, at once. To date, I have not heard from them re: any reply being received from N.F.M.D.

Rodderup Fell Mine Statistics. - June 1946.

W e s t F l a t s .

J. Johnson & Partners.

106 $\frac{1}{2}$  Days worked.

| <u>Flat.</u> | L  | W    | S.F.  | S.M.    | H.   | C.F.        | C.M.           |
|--------------|----|------|-------|---------|------|-------------|----------------|
| No.1 W.      | 10 | x 13 | - 130 | - 12.08 | x 13 | - 1690      | - 47.35        |
| No.2 Side    | 28 | x 6  | - 168 | - 15.60 | x 8  | - 1344      | - 38.06        |
| No.3 Rise.   | 8  | x 6  | - 48  | - 4.46  | x 5  | - 240       | - 6.79         |
|              |    |      |       |         |      | <u>3274</u> | <u>- 92.70</u> |

Tonnage to Mill: 150 Tons

Wages Paid: £77: 12: 5.

Cost per Cu.M.: - 16/9.

(Excluding holiday pay).

# MINE STATISTICS

1946

|           | Tons of Ore Mined |     | Cubic Metres Cut |        | Tons per Cubic Metre |       | Days Worked |          |           |          |       |        | Tons per Miner's Day |          | Cubic Metres per Miner's Day |       | Wages paid per Miner's Day |       | Wages paid per Underground Man |       | Wages paid per Cubic Metre |       | No of Drills Working |         | Dynamite |  |
|-----------|-------------------|-----|------------------|--------|----------------------|-------|-------------|----------|-----------|----------|-------|--------|----------------------|----------|------------------------------|-------|----------------------------|-------|--------------------------------|-------|----------------------------|-------|----------------------|---------|----------|--|
|           |                   |     |                  |        |                      |       | Miners      |          | Labourers |          |       |        |                      |          |                              |       |                            |       |                                |       |                            |       |                      |         |          |  |
|           | Headings          | Dev | Total            | In Ore | In Deads             | Total | In Ore      | In Deads | In Ore    | In Deads | Total | In Ore | Total                | Headings | Dev                          | Total | Headings                   | Total | Headings                       | Total | Headings                   | Total | lbs                  | per ton |          |  |
| Nentsbury |                   |     |                  |        |                      |       |             |          |           |          |       |        |                      |          |                              |       |                            |       |                                |       |                            |       |                      |         |          |  |
| 2 Mos Av  |                   |     |                  |        |                      |       |             |          |           |          |       |        |                      |          |                              |       |                            |       |                                |       |                            |       |                      |         |          |  |
| 9 Mos Av  |                   |     |                  |        |                      |       |             |          |           |          |       |        |                      |          |                              |       |                            |       |                                |       |                            |       |                      |         |          |  |
| Rodderup  | 150               | -   | 150              | 93     | -                    | 93    | 161         | -        | 161       | 86       | -     | 86     | 174                  | 108      | 108                          | 147   | 147                        | 169   | 169                            | 169   | 169                        | 2     | 150                  | 1.00    |          |  |
| 2 Mos Av  | 150               | -   | 150              | 93     | -                    | 93    | 161         | -        | 161       | 86       | -     | 86     | 174                  | 108      | 108                          | 147   | 147                        | 169   | 169                            | 169   | 169                        | 2     | 265                  | 1.09    |          |  |
| 9 Mos Av  | 212               | -   | 212              | 114    | -                    | 114   | 186         | -        | 186       | 109      | -     | 109    | 194                  | 104      | 104                          | 140   | 140                        | 171   | 171                            | 171   | 171                        | 2     | 227                  | 1.07    |          |  |

## COMPARATIVE STATEMENT.

\*.....Nentsbury .....\* Rodderup .....\*

Nentsbury ..... Tons in Deads .....  
Rodderup ..... Tons in Deads .....

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|        |  |
|--------|--|
|        |  |
| Mos Av |  |
| Mos Av |  |

| MONTH     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               |              |               |
| February  |              |               |              |               |
| March     |              |               |              |               |
| April     | 112          | 24/-          |              |               |
| May       | 136          | 17/-          |              |               |
| June      | 93           | 10/4          |              |               |
| July      |              |               |              |               |
| August    |              |               |              |               |
| September |              |               |              |               |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |

# Report on the Nenthead Mines July 1946

| REPORT<br>*****                                                                                                                                                                                 |                   |                  |                                               |                |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|------------------|-----------------------------------------------|----------------|
| on the                                                                                                                                                                                          |                   |                  |                                               |                |
| NENTHEAD                                                                                                                                                                                        |                   | MINES.           |                                               |                |
| *****                                                                                                                                                                                           |                   | *****            |                                               |                |
| JULY                                                                                                                                                                                            |                   | 1946.            |                                               |                |
| *****                                                                                                                                                                                           |                   | *****            |                                               |                |
|                                                                                                                                                                                                 | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>                              | <u>Totals.</u> |
| Ore mined                                                                                                                                                                                       | Nil.              | Occupied         | Nil.                                          | Nil.           |
| Ore Milled                                                                                                                                                                                      | "                 | by N.F.M.D.      | "                                             | "              |
| Pb. Concs. prdcd.                                                                                                                                                                               | "                 |                  | 6.642 Tons                                    | 6.642 Tons     |
| Hours worked                                                                                                                                                                                    |                   |                  | (Slime plant<br>only operated<br>about 40 hrs |                |
| Tons per hour                                                                                                                                                                                   |                   |                  | Estimated                                     |                |
| Tons in stock                                                                                                                                                                                   | Nil.              | Nil.             | quantity treated<br>about 160 Tons.)          | Nil.           |
| STOCKS.                                                                                                                                                                                         |                   |                  |                                               |                |
|                                                                                                                                                                                                 | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u>                              | <u>Totals.</u> |
| Crude Ore                                                                                                                                                                                       | Nil.              | Nil.             | 2500 Tons                                     | 2500 Tons.     |
| <u>Galena</u> in stock..... Nil.                                                                                                                                                                |                   |                  |                                               |                |
| <u>Witherite</u> in stock ..... Nil.                                                                                                                                                            |                   |                  |                                               |                |
| <u>Fluor Spar</u> in stock..... Nil.                                                                                                                                                            |                   |                  |                                               |                |
| <br><u>Compressed Air</u> produced at Nenthead, from Water Power, about 600<br>cubic feet per minute at 90 lbs per sq. inch at<br>Nenthead, and about 80 lbs per sq. inch at Nentsbury<br>Mine. |                   |                  |                                               |                |
| <br><u>Compressed Air</u> produced at Rodderup by Water Power and Electricity<br>about 500 cu.ft. per minute at a pressure of 85 lbs<br>per square inch at the working places "A" and "B".      |                   |                  |                                               |                |



## **NENTHEAD MINES**

### **JULY 1946**

NENTSBURY MINE. In the early part of July, the Winze was pumped dry, and it and the X-Cut inspected. Work commenced in the X-Cut North, during the week ending July 13th and continued during the week ending July 27th. As previously reported, "T" Vein was cut and where cut, the in Vein in the floor was over 1 metre in width, less than 1 metre in the roof of the X-Cut in the Quarry hazel. Good, stones of Zinc Blende were found in the vein in the floor, and Zinc Blende and some Witherite in the roof. Any programme we decide to carry out may have to be changed slightly, should the throw of the strata with so many veins in the vicinity force us to do so. Cox Vein was not cut during July, but should be cut, if all goes well, by the end of August. Future prospecting will depend to some extent, upon results obtained in "T" and "C" Veins. Owing to the size of the Winze, and the amount of Compressed Air we can produce by the staff employed, progress will be slow. In the monthly report, I can add little to what has been reported in the weekly reports.

MILL. Operated and maintained by Jas. H. Harrison up to the end of the month, since when it has been handed back to the V.M. Co. A statement for any rent due etc. will be sent to Messrs. Harrison early in August.

RODDERUP MINE. Prospecting in points "A" and "B", is proceeding slowly owing to scarcity of labour. Only one skilled Rock Drill Miner is employed, and to increase the footage drilled, the man is paid a bonus based on footage drilled.

In "A" point, the prospect is encouraging, although there is not sufficient Galena to make the ore broken payable. The rock in "A" is softer than in "B" which is in the bottom of the Tyne Bottom limestone, and in "A" there is much Fluor Spar and several small strings of Galena are crossing the face of the drift. There is also rather more than the usual quantity of water flowing from the face of the drift. It is impossible to give any reason for this extra quantity of water. In many parts of the country, the presence of water is indicative of mineral in the vicinity. As the miner is drilling alternately in "A" and "B", the rate of progress in each place is lowered by 50%. I am doing all I possibly can to procure more labour, but with so many Government Schemes, it is difficult to get men to work underground. It is also impossible to get P.O.W. labour for mines.

MILL. The Mill is in good condition and whenever possible we are running the Slime plant to treat slime heaps and slime from old pits. So far, we have produced sufficient concentrates to more than pay labour costs in the mill and the maintenance costs of the mill.

SALES. During the month and after deducting 1.90% moisture, we sold 14.862 Tons of 1/5 mm. size Lead Ore at £46.75 per ton, and 7.480 tons of Slime concentrates at £37.875 per ton, both F.O.R. Alston Station, for British Pyros White Lead Co. Ltd. When the moisture percentage is determined in London there may be some adjustment of the weight. 1.90% has been the average moisture percentage for several parcels delivered. In the Mineral Sheet for the

month, the figures given are 22.343 tons, a slight difference of 0.001 Tons, being an arithmetical calculation to make the sheet balance. To overcome this, we had to include a small bonus to the previous estimated weight. Gravel sold during the month amounted to 187.50 Tons. The nett amount realised was £50. 12. 6.

GENERAL. Messrs. Blackburn & Main wrote N.F.M.D. for the balance due to the V.M. Co. for dump material treated by them, and after some delay received a reply from N.F.K.D. stating that they had sent the statement to the proper Government Authority, with the request that the Authority should make an early payment.

Messrs. Blackburn & Main have also taken up the matter of the termination of the leases with G.H.E. and Lord Allendale. No replies were received at the end of the month. It is my opinion that both parties will be very slow in arriving at any decision and I consider it is most likely they will request the V.M. Co. to carry out the terms of the leases which seem to be in favour of the landlords.

May I state that this is an expression of my personal opinion - Messrs. Blackburn & Main will of course await the replies from the respective agents for the landlords.

We have, however, done all we could to obtain replies from the Landlords. Nobody in this country seems to know what action the Government may take in the near future with regard to nationalisation of industries, and on what terms and conditions. Consequently, replies to letters are very slow and generally non-committal in tone.

Rodderup Fell Mine.

South Side Flatts.

T. Jackson & Partners.

123 Days worked.

Drift.

|          | L  | W   | S.F.  | S.M.   | H   | C.F.         | C.M.           |
|----------|----|-----|-------|--------|-----|--------------|----------------|
| No.1.(A) | 21 | x 5 | - 105 | - 9.75 | x 8 | - 840        | - 23.78        |
| No.2 (B) | 14 | x 6 | - 84  | - 7.80 | x 8 | - <u>672</u> | - <u>19.03</u> |
|          |    |     |       |        |     | <u>1502</u>  | - <u>42.80</u> |

Tonnage to Mill:- Nil.

Wages paid: £89. 0. 3.

Cost per Cu.M.:- 41/7.

# MINE STATISTICS

1940.

|           | Tons of Ore Mined |          | Cubic Metres Cut |        |          | Tons per Cubic Metre |        |          | Days Worked |        |           |       |           |       | Tons per Miner's Day |          | Cubic Metres per Miner's Day |        | Per Underground Man |           | Wages paid per Miner's Day |       | Wages paid per Underground Man |       | Wages paid per Cubic Metre |       | No of Drills Working |       | Dynamite |         |
|-----------|-------------------|----------|------------------|--------|----------|----------------------|--------|----------|-------------|--------|-----------|-------|-----------|-------|----------------------|----------|------------------------------|--------|---------------------|-----------|----------------------------|-------|--------------------------------|-------|----------------------------|-------|----------------------|-------|----------|---------|
|           |                   |          |                  |        |          |                      |        |          | Miners      |        | Labourers |       |           |       |                      |          |                              |        |                     |           |                            |       |                                |       |                            |       |                      |       |          |         |
|           |                   | Headings | Days             | In Ore | In Deads | Total                | In Ore | In Deads | Total       | In Ore | In Deads  | Total | Bar-gains | Wages | In Ore               | In Deads | Total                        | In Ore | Total               | Head-ings | Days                       | Total | Head-ings                      | Total | Head-ings                  | Total | Head-ings            | Total | lbs.     | per ton |
| Nantsbury |                   |          |                  |        |          |                      |        |          |             |        |           |       |           |       |                      |          |                              |        |                     |           |                            |       |                                |       |                            |       |                      |       |          |         |
| Mos Av    |                   |          |                  |        |          |                      |        |          |             |        |           |       |           |       |                      |          |                              |        |                     |           |                            |       |                                |       |                            |       |                      |       |          |         |
| Mos Av    |                   |          |                  |        |          |                      |        |          |             |        |           |       |           |       |                      |          |                              |        |                     |           |                            |       |                                |       |                            |       |                      |       |          |         |
| Rodderup  |                   |          |                  |        |          |                      |        |          |             |        |           |       |           |       |                      |          |                              |        |                     |           |                            |       |                                |       |                            |       |                      |       |          |         |
| Mos Av    | 212               | -        | 114              | -      | 186      | -                    | 186    | -        | 186         | -      | 186       | -     | 186       | -     | 186                  | -        | 186                          | -      | 186                 | -         | 186                        | -     | 186                            | -     | 186                        | -     | 186                  | -     | 186      | -       |
| Mos Av    | 159               | -        | 85               | -      | 165      | -                    | 165    | -        | 165         | -      | 165       | -     | 165       | -     | 165                  | -        | 165                          | -      | 165                 | -         | 165                        | -     | 165                            | -     | 165                        | -     | 165                  | -     | 165      | -       |

## COMPARATIVE STATEMENT.

Nentsbury ..... Rodderup .....

Nentsbury ..... Tons in Deads ....

Rodderup ..... Tons in Deads ....

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|        |  |
|--------|--|
| Mos Av |  |
| Mos Av |  |

| MONTH     | Cubic Metres | Cost per C. M. | Cubic Metres | Cost per C. M. |
|-----------|--------------|----------------|--------------|----------------|
| January   |              |                |              |                |
| February  |              |                |              |                |
| March     |              |                |              |                |
| April     | 112          | 20/-           |              |                |
| May       | 136          | 17/-           |              |                |
| June      | 98           | 16/4           |              |                |
| July      | 43           | 17             |              |                |
| August    |              |                |              |                |
| September |              |                |              |                |
| October   |              |                |              |                |
| November  |              |                |              |                |
| December  |              |                |              |                |

## Report on the Nenthead Mines August 1946

### R E P O R T @@@@@@@@@@@@

on the

### N E N T H E A D    M I N E S @@@@@@@@@@@@@@@@    @@@@@@@@@@

A U G U S T,    1 9 4 6.  
@@@@@@@@    @@@@@@@@

---

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u>  | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------|-------------------|------------------|----------------|
| Ore Mined         | Nil.              | Occupied          | Nil.             | Nil.           |
| Ore Milled        | "                 | by<br>N. F. M. D. | "                | "              |
| Pb. Concs. prded. | "                 |                   | "                | "              |
| % Recovery        | "                 |                   | "                | "              |
| Hours worked      | "                 |                   | "                | "              |
| Tons per hour     | "                 |                   | "                | "              |
| Tons in stock     | "                 |                   | "                | "              |

---

### S T O C K S.

|            | <u>Nentsbury.</u>          | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------|----------------------------|------------------|------------------|----------------|
| Crude Ore. | Nil.                       | Nil.             | 2500 Tons        | 2500 Tons.     |
|            | <u>Galena</u> in stock     |                  | Nil.             |                |
|            | <u>Witherite</u> in stock  |                  | Nil.             |                |
|            | <u>Fluor Spar</u> in stock |                  | Nil.             |                |

---

Compressed Air produced at Nenthead, from water power only, 600 cubic feet per minute at 90 lbs pressure per square inch at Nenthead, and about 80 lbs pressure in Nentsbury Mine.

Compressed Air produced at Rodderup by water power and electricity, 550 cubic feet per minute at 85 lbs pressure at the working faces "A" and "B".

---

## NENTHEAD MINES AUGUST 1946

NENTSBURY MINE. I can add little in the monthly report to what I have stated in the weekly reports. Prospecting from the X-Cut "N" we definitely cut Treloar Vein, and the values are as reported, viz: Witherite in the roof of the X-Cut and the Drift E, and Zinc Blende in the Floor of the drifts. In some places good Blende, with very little Witherite, was upwards of one foot in width. Basing our calculations upon the positions of Cox and Dupont Veins as seen in the Great Limestone strata above, where both Veins were rich in Galena, we expected to cut "C" Vein between 15 and 18 feet East of the X-Cut North, and accordingly drove E. on the south side of "T" Vein. By the end of August, we had driven 30 feet E. from the West side of the X-Cut N., but found no sign of "C" Vein. We then decided to drive a X-Cut a few feet West from the X-Cut N. and several feet S. of "T" Vein. After driving W. about 8 feet we cut the wall of what seemed like a N. by S. Vein. This Vein, or fault — not enough work was done by the end of the month to fully prove the width of the vein or fault - we have not yet determined. We have, however, proved that the vein or fault has thrown the strata 2.5 feet. We therefore conclude that this may be the "C" Vein, and if not it is a parallel N. by S. Vein or fault. We saw no values where the wall was cut into. I reported particulars in the weekly report for the week ending August 31<sup>st</sup>, and also that Dr. K. C. Dunham spent Aug. 30th in Nentsbury Mine with me, and checked my measurements etc. Dr. Dunham took details, measured distances, and took the angle of inclination West of "C" Vein where seen in the levels above and in due course will send a written report and sketch of the position as it appeared to him. I may state that Dr. Dunham is giving his services to the Company. He is a member of the Geological Survey of Great Britain, is very highly qualified and has about 15 year's experience in this country and America.

During August, when we were unsuccessful in finding "C" Vein E. of the X-Cut N., I tried to get in touch with a Mr. Hall, whom I saw in late 1945 with regard to diamond drilling, with a view of considering diamond drilling as a speedier means of finding veins in the vicinity. Mr. Hall was on holiday and only this morning (Sept. 6th) was I able to get in touch with him per telephone. Mr. Hall informed me that the diamond drill was in use and he could not state definitely when it would be free. He would advise me immediately it was free, and would visit Nenthead later, to discuss the question of diamond drilling and give me detailed costs etc. In the meantime, we shall continue driving, with the small labour force employed, and which is all we can get at present. I can definitely state that it is Dr. Dunham's opinion that as it has been definitely proved that "T" Vein is mineralised in the top of the Quarry Hazel, it is reasonable to assume that "C" and "D" Veins at least would be mineralised in the same strata, and if not in the immediate area in which we are driving, then possibly in the area South of "T" Vein, where work was done on "T" Vein East of "D" Vein. I shall give full particulars weekly, as progress proceeds.

MILL. Messrs. Jas. H. Harrison have paid all accounts due from them. The Mill is left in very good condition.

RODDERUP MINE. Progress in points "A" and "B" has been very slow owing to lack of labour. Work is mainly confined to point "A". The presence of Fluor Spar and change in the strata south of the last fault we have passed through is encouraging. In point "B" not enough work has been done to prove if the strata has changed south of the "fault" we cut during the month. During August, it rained almost incessantly day and night, and a large quantity of surface water has percolated through the ground to the mine levels, and although pumping has been continued for 24 hours daily, the water in the mine has risen. No serious result is anticipated.

RODDERUP MILL. In good running order. Occasionally we work the slime plant on old accumulated slime tailings. When the tanks are cleaned, the concentrates will be weighed and reported.

#### SALES.

Lead Ore. None sold. Messrs. British Pyros White Lead Co. have paid for all the concentrates supplied to them.

Gravel. Only 22.50 Tons was sold, for a profit of £5. 13. 6. The wet weather has interfered with all outdoor work.

GENERAL. I have reported periodically and sent copies of all correspondence received from Messrs. Blackburn & Main, and N.F.M.D. We are pressing now for a final settlement for the dumps, and at a recent interview with our solicitors, we considered the question of serving a Writ on N.F.M.D. A final discussion and decision will be made on the 11<sup>th</sup> Sept.

#### Rodderup Mine - August 1946.

##### Flats South of Rodderup Vein.

| <u>T. Jackson &amp; Partners.</u> |    |     |      |        |     |       |         | 89 Days Worked. |
|-----------------------------------|----|-----|------|--------|-----|-------|---------|-----------------|
|                                   | L  | W   | S.F. | S.M.   | H.  | C.F.  | C.M.    |                 |
| Drift A.                          | 17 | x 5 | - 85 | - 7.90 | x 6 | - 500 | - 14.44 |                 |
| " B.                              | 10 | x 5 | - 50 | - 4.64 | x 8 | - 400 | - 11.33 |                 |
| " B.                              | 8  | x 5 | - 40 | - 3.72 | x 9 | - 360 | - 10.19 |                 |
|                                   |    |     |      |        |     |       | 1270    | - 35.96         |

Tonnage to Mill:- Nil.

Wages Paid £65. 9. 8.

Cost per Cu.M.:- 36/5.

##### Nentsbury Mine - Prospection from Winze.

| <u>A. S. Teasdale &amp; Partners.</u> |    |     |       |         |     |       |          | 81 Days Worked. |
|---------------------------------------|----|-----|-------|---------|-----|-------|----------|-----------------|
|                                       | L  | H   | S.F.  | S.M.    | W.  | G.F.  | C.M.     |                 |
| Drift E.                              | 16 | x 7 | - 112 | - 10.40 | x 5 | - 560 | - 15.860 |                 |
| " W.                                  | 10 | x 7 | - 70  | - 6.50  | x 5 | - 350 | - 9.910  |                 |
|                                       |    |     |       |         |     |       | 910      | - 25.770        |

Tonnage to Mill: Nil.

Wages Paid £57. -. 9.

Cost per Cu.M.:- 44/3.

August 1946.

## COMPARATIVE STATEMENT.

✠.....Nentsbury .....✠ Rodderup .....✠

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

|  |         |
|--|---------|
|  | Mos. Av |
|  | Mos. Av |

| MONTH     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               |              |               |
| February  |              |               |              |               |
| March     |              |               |              |               |
| April     |              |               | 112          | 20/-          |
| May       |              |               | 136          | 17/-          |
| June      |              |               | 93           | 16/4          |
| July      |              |               | 43           | 4/17          |
| August    |              |               |              |               |
| September | 96           | 44/3          | 56           | 36/5          |
| October   |              |               |              |               |
| November  |              |               |              |               |
| December  |              |               |              |               |



# Report on the Nenthead Mines September 1946

## REPORT

on the

## NENTHEAD MINES

SEPTEMBER, 1946

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>                   | <u>Totals.</u> |
|-------------------|-------------------|------------------|------------------------------------|----------------|
| Ore mined         | Nil.              | Occupied<br>by   | Nil.                               | Nil.           |
| Ore milled        | "                 | N.F.M.D.         | "                                  | "              |
| Pb. Concs. prdcd. | "                 |                  | 5.00 Tons<br>(from Slime Residues) | 5.00 Tons      |
| % Recovery        | "                 |                  | unknown.                           | unknown.       |
| Hours worked      | "                 |                  | -                                  | -              |
| Tons per hour     | "                 |                  | -                                  | -              |
| Tons in stock     | "                 |                  | Nil.                               | Nil.           |

## STOCKS.

|                               | <u>Nentsbury.</u> | <u>Rodderup.</u>             | <u>Wellhope.</u> | <u>Totals.</u> |
|-------------------------------|-------------------|------------------------------|------------------|----------------|
| Crude Ore                     | Nil.              | Nil.                         | 2500 Tons        | 2500 Tons      |
| <u>Galena</u> , in stock,     |                   | 5 Tons (from Slime Residues) |                  |                |
| <u>Witherite</u> , in stock,  |                   | Nil.                         |                  |                |
| <u>Fluor Spar</u> , in stock, |                   | Nil.                         |                  |                |

## Compressed Air

produced at NENTHEAD, from Water Power, 300 cubic feet per minute at 90 lbs pressure per square inch at Nenthead, and about 80 lbs pressure in NENTSBURY MINE;

produced at RODDERUP, by Water Power and Electricity, about 550 cubic feet per minute at 85 lbs pressure at points "A" and "B", and for pumping.



## **NENTHEAD MINES SEPTEMBER 1946**

NENTSBURY MINE. Prospecting from the Winze: - In the early part of the month a X-Cut driven West, was extended 16 feet. At 8 feet, we cut a "fault" or small vein about 2 ft. 6 inches in width, which displaced the strata about 2.5 feet. In my August Report, I stated that Dr. K. C. Dunham inspected all the work done. On Sept, 14th, I wrote to Dr. Dunham and sent him a sketch plan of the work done etc. I have not yet received a reply from him, nor have I heard anything further from Consolidated Pneumatic Co.'s Engineer in regard to the possibility of obtaining a Diamond Drill.

Being uncertain what the fault or vein was, which cut in the X-Cut W., I decided to continue driving the X-Cut East, with the object of intersecting Dupont Vein, and at the end of September this X-Cut had been extended 45 feet. It is not possible to state how much further East we must drive to intersect "D' Vein, because we are unable to state where the Cox Vein is.

Should the fault or small vein cut in the X-Cut West, prove to be "C" Vein, the 8 feet added to the 45 feet, makes 53 feet, and in the Great Limestone, in the levels above, "C" and "D" Veins were approximately 60 feet apart.

Consequently it would seem that we should intersect "D" Veins somewhere between about 7 feet and 15 feet further East, if the fault or small vein was actually "C" Vein. We shall continue to drive East as fast as possible, until we have driven the full distance of 15 feet or even further.

Should we intersect "D" Vein, the Quarry Hazel will be thrown up several feet, and consequently we should have more of the Quarry Hazel above us. Our rate of progress is slow, accounted for by the fact that the Winze is small, and we have to transport the broken rock back through the X-Cut E. and the X-Cut N., hoist the rock, and tram it away from the Winze to stock it in old workings. This method will have to be changed, should we find payable ore in either of the veins. In the meantime, we are doing all we can to find "D" Vein.

MILL. In good condition.

RODDERUP MINE. Progress during the month has been slow, owing to various causes, namely a prolonged spell of extremely wet weather, during which, for a fortnight, we were flooded out in Points "A" and "B" to the foreman's illness; and to necessary repairs to three old shafts, which, owing to the wet weather, had collapsed. The latter were very old and could not be seen on the surface. Evidently, they covered over many years ago and grass grew on the covering. Until they collapsed we did not know they existed.

In points "A" and "C", drifts were extended and a small amount of work done in point "B". Point "A" is now 132 feet from Rodderup Vein, and Point "C" driven at an angle, to point A, is about 120 feet. Point "B" was only driven a few feet, and the forebreast of the Flat is now about 48 feet south of Rodderup Vein. Galena is visible in the three places, but not in payable quantities.

MILL. The Mill is in fair condition, and during the month, when three men have been available, we have Operated the slime plant to treat old slime residues, from which we have recovered 5 Tons of Slime Concentrates.

LABOUR. There is no improvement in the labour position; with a Semi-Government Foundry working in Alston, a Government house-building scheme in Nenthead, and a Barytes mine operating near and two small collieries near, all having priority, there is no labour available. I was informed that there were only three men on the unemployed list in Alston, and these I consider unemployable.

SALES.

Lead Ore. None sold.

Gravel. 89.50 Tons sold for a net value of £19. 14. 3.

GENERAL. N. F.H.D. On the 26th Sept, we received from the Ministry of Supply, a Payable Order for £3009. 4. 4., and a certificate of Tax Deduction for £694. 12. 0. Particulars were sent to Head Office on the 27th inst. We are still in dispute with the Ministry re: the difference of 51,219 Tons of dump material, which they state was a mistake on their part when rendering the monthly figures to us. At 6d per ton the amount we are claiming as still outstanding is £1280. 9s 6. I have handed all correspondence and the cheque to Messrs. Blackburn and Main, and requested them to write the Ministry of Supply informing them that we accept the cheque for £3009. 4. 4. and the Certificate of Tax Deduction of £694. 12. 0. as payment on a/c, and still press for £1280. 9. 6., with proportionate interest at 2% due, and for the sum of £78. 15. 0. for expenses which the mineral Valuer agreed to recommend for payment. Messrs. Blackburn and Main are now dealing with this matter. At the end of Sept, we received a cheque for £50 from the Ministry of Supply in respect of one quarter's rent to Sept. 29th for Rampgill Mill.

This has been paid into our a/c at Martins Bank Ltd.

Income Tax. During the month, I received a Precept from the Income Tax Commissioners, requiring me to deliver, or cause to be delivered, the original documents and correspondence, or exact copies certified as such by myself, relating to the sale of dump material to N.F.M.D., before October 12th 1946. I consulted Messrs. Blackburn & Main, who advised me to contact our Auditors, Messrs. Greaves & Co. and consult them in the first place. This I did, and Mr. Hutchinson, partner of the firm, visited Nenthead and together we went through the necessary requisition orders, and all the correspondence. Mr. Hutchinson took away the relevant correspondence etc., and is sending it to the Commissioners on our behalf, with a covering letter. We are not in the least perturbed re: the Precept, but it has meant much additional work. In his covering letter, Mr. Hutchinson will produce evidence to show that not until Sept. 26th, 14 days after the Commissioners issued their precept, did we receive a cheque which even then we have not accepted as a final settlement. The Commissioners will see that the V.M. Co. were pressing for nine months for a settlement, which has not been made correctly yet.

Aerial Ropeway. Mr. Reginald H. Pearson inspected the Ropeway on Oct. 2nd, and obtained full particulars of what we are offering for sale. He considered the Ropeway was in a better condition than he had expected to find it. He will submit a report in the course of a few days.

County Council & New Road. The County Surveyor and Mr. J. E. Johnston, Agent for Greenwich Hospital Estates, met at Nenthead on Sept. 27th. I was unable to be present as I was only notified by telephone late that morning and had a previous engagement for that time. Mr. Johnston called to see me the following morning, and we discussed the matter in the light of his interview with the Surveyor. I informed Mr. Johnston, that I could not recommend the V.M. Co. to consent to anything until we were first supplied with a plan showing the County Surveyor's proposals and had received from the Admiralty an assurance that they would not hold the Company responsible for any payment later if the Company agreed to the proposals. It was agreed that I should ask the County Surveyor for such a plan, and for a copy to be sent to Mr. Johnston, and this I did. The Surveyor has replied agreeing to send a plan later, and to arrange a date when I can meet him on the site. I gathered from my discussion with Mr. Johnston, that the Surveyor was willing to strengthen the under-ground tunnel, at the County Council's expense, under the road, and give the Company an assurance that they could build an overhead bridge later, should the Company wish to do so, but the Council could not agree to our putting a tramway across the surface of the road. I think that a reasonable arrangement can be reached, but I will await the plan and a meeting with all the parties concerned.

Rodderup Mine.

Flats South of Rodderup Vein.

G. Robinson & Partners.

56 Days Worked.

|          | L  | W   | S.F. | S.M.   | H.  | C.F.       | C.M.           |
|----------|----|-----|------|--------|-----|------------|----------------|
| Drift A. | 11 | x 6 | - 66 | - 6.13 | x 6 | - 396      | - 11.21        |
| " B.     | 4  | x 6 | - 24 | - 2.23 | x 8 | - 192      | - 5.44         |
| " C.     | 7  | x 5 | - 35 | - 3.25 | x 9 | - 315      | - 3.92         |
|          |    |     |      |        |     | <u>903</u> | <u>- 25.57</u> |

Tonnage to Mill:- Nil.

Wages Paid: £39. 8. 8.

Cost per Cu.M.:- 30/10.

Nentsbury Mine.

Prospection from the Winze.

H. Peart & Partners.

72 days worked.

|          | L  | H   | S.F.  | S.M.    | W.  | C.F.  | C.M.    |
|----------|----|-----|-------|---------|-----|-------|---------|
| X-Cut E. | 18 | x 7 | - 126 | - 11.70 | x 5 | - 630 | - 17.84 |

Tonnage to Mill:- Nil.

Wages Paid £50. 14. 0.

Cost per Cu.M.:- 56/10.

| MINE STATISTICS..... <i>September</i> ..... 19 <i>16</i> . |  |     |  |                  |  |          |  |                      |  |        |  |             |  |       |  |                      |  |          |  |                              |  |        |  |                      |  |       |  |                            |  |          |  |                                |  |        |  |                            |  |       |  |                           |  |          |  |                      |  |  |  |          |         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------------------------------------|--|-----|--|------------------|--|----------|--|----------------------|--|--------|--|-------------|--|-------|--|----------------------|--|----------|--|------------------------------|--|--------|--|----------------------|--|-------|--|----------------------------|--|----------|--|--------------------------------|--|--------|--|----------------------------|--|-------|--|---------------------------|--|----------|--|----------------------|--|--|--|----------|---------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Tons of Ore Mined                                          |  |     |  | Cubic Metres Cut |  |          |  | Tons per Cubic Metre |  |        |  | Days Worked |  |       |  | Tons per Miner's Day |  |          |  | Cubic Metres per Miner's Day |  |        |  | Per Under-ground Man |  |       |  | Wages paid per Miner's Day |  |          |  | Wages paid per Underground Man |  |        |  | Wages paid per Cubic Metre |  |       |  | Wages paid per ton of Ore |  |          |  | No of Drills Working |  |  |  | Dynamite |         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                                                            |  |     |  |                  |  |          |  |                      |  |        |  |             |  |       |  |                      |  |          |  |                              |  |        |  |                      |  |       |  |                            |  |          |  |                                |  |        |  |                            |  |       |  |                           |  |          |  |                      |  |  |  | lbs.     | per ton |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Headings                                                   |  | Dev |  | In Ore           |  | In Deads |  | Total                |  | In Ore |  | In Deads    |  | Total |  | In Ore               |  | In Deads |  | Total                        |  | In Ore |  | In Deads             |  | Total |  | In Ore                     |  | In Deads |  | Total                          |  | In Ore |  | In Deads                   |  | Total |  | In Ore                    |  | In Deads |  | Total                |  |  |  |          |         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Nentsbury                                                  |  |     |  |                  |  |          |  |                      |  |        |  |             |  |       |  |                      |  |          |  |                              |  |        |  |                      |  |       |  |                            |  |          |  |                                |  |        |  |                            |  |       |  |                           |  |          |  |                      |  |  |  |          |         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 Mos Av                                                   |  |     |  |                  |  |          |  |                      |  |        |  |             |  |       |  |                      |  |          |  |                              |  |        |  |                      |  |       |  |                            |  |          |  |                                |  |        |  |                            |  |       |  |                           |  |          |  |                      |  |  |  |          |         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 Mos Av                                                   |  |     |  |                  |  |          |  |                      |  |        |  |             |  |       |  |                      |  |          |  |                              |  |        |  |                      |  |       |  |                            |  |          |  |                                |  |        |  |                            |  |       |  |                           |  |          |  |                      |  |  |  |          |         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Rodderup                                                   |  |     |  |                  |  |          |  |                      |  |        |  |             |  |       |  |                      |  |          |  |                              |  |        |  |                      |  |       |  |                            |  |          |  |                                |  |        |  |                            |  |       |  |                           |  |          |  |                      |  |  |  |          |         |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

# Report on the Nenthead Mines October 1946

## REPORT \*\*\*\*\*

on the

## NENTHEAD MINES \*\*\*\*\*

OCTOBER, 1946  
\*\*\*\*\*

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------|------------------|------------------|----------------|
| Ore mined         | Nil.              | Occupied         | Nil.             | Nil.           |
| Ore milled        | "                 | by<br>N.F.M.D.   | "                | "              |
| Pb. Concs. prdcd. | "                 |                  | "                | "              |
| % Recovery        | "                 |                  | "                | "              |
| Hours worked      | "                 |                  | "                | "              |
| Tons per hour     | "                 |                  | "                | "              |
| Tons in stock     | "                 |                  | "                | "              |

## S T O C K S.

|                              | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------------------|-------------------|------------------|------------------|----------------|
| Crude Ore.                   | Nil.              | Nil.             | 2500 Tons        | 2500 Tons      |
| <u>Galena</u> , at Rodderup, |                   | 5.00 Tons        |                  |                |
| <u>Witherite</u>             |                   | Nil.             |                  |                |
| <u>Fluor Spar</u>            |                   | Nil.             |                  |                |

## Compressed Air

produced at NENTHEAD, from water power, 300 cu. ft. per minute at 90 lbs pressure per sq. inch at Nenthead, and about 80 lbs pressure in NENTSBURY Mine.

produced at RODDERUP, from water power and electricity, about 550 cu. feet per minute at 85 lbs pressure at points "A", "B" and "C" and for pumping.

## **NENTHEAD MINES OCTOBER 1946**

NENTSBURY MINE. Prospection from the Winze: - The X-Cut East, with the object of cutting Dupont Vein in the Quarry Hazel, was driven a total distance of 69 feet from the West wall of the X-Cut driven North from the Winze to cut Treloar Vein. I can add nothing in this report, to what was given in my weekly Reports for the weeks ending October 20th and October 31st. Enclosed with the report for the week ending Oct. 26th, was a copy of a letter received from Dr. K. C. Dunham, together with my comments upon his observations. Should it be proved that the fault or small vein, which we encountered in the X-Cut driven West from the Winze, is actually Cox Vein, then the 8 feet driven West to the fault or vein, plus the 69 feet driven East, gives a total distance from the presumed "C" Vein to the end of the X-Cut East of 77 feet. This distance is greater than the distance between the two Veins, "C" and "D" in the Great Limestone above, but as the distance between these varied in places, it is not possible to state definitely that the small strings of Blende which we passed through represent Dupont Vein. Moreover, most veins incline considerably in "Plate" stratum, and are almost vertical in the Limestone, and should be more or less vertical in the Quarry Hazel and hard strata. We are therefore driving a few feet further East, and shall also X-Cut N., about the end of the X-Cut East, to ascertain whether Treloar Vein actually exists as far as this extremity.

I have to admit that our rate of progress is slow. Actually, we have four men, including the foreman underground who does the drilling. One man removes the broken rock to the Winze and another man hoists it and fills the wagon, while the fourth man assisted by the man at the hoist, trams the rock to the old working place where it is stored. We have not engaged a man with a horse to draw the rock outside, as the expense would be out of all proportion to the quantity of rock to be moved. The Winze is also too small to work either more men or double shift with advantage. Should we cut payable ore in the Quarry Hazel, we would arrange to drive an Incline from the Horse-level downwards. The outlook for labour at Nentsbury is rather better than it was. The immediate problem is to prove the position and value of Dupont Vein East, and the continuation of Treloar Vein East of the end of the X-Cut East.

MILL. In good condition.

RODDERUP MINE. In Rodderup Vine, only four men are employed, including the foreman, who does the drilling. The horse owner, who draws the broken rock outside, only works when the horse is needed, although we offered him daily employment as a labourer, at the normal rate of pay, in the mine. Progress is therefore slow. Work was continued in points "A", "B" and "C", the foreman drilling alternately in each place when available. There is ore, Galena and Fluor Spar, in each place but the quantity of Galena is unpayable. Small cross strings continue to cross these working places, and although the bearings of these strings vary, they are more or less bearing similar to Rodderup Vein. It is possible we may get a skilled driller for Rodderup early in November. Although there is no immediate prospect of obtaining many more skilled miners, the outlook is brighter.

MILL. In fair running condition.

SALES.

Lead Ore. None sold.

Gravel. 123.85 Tons sold, realising £30. 13s. 7d. nett.

GENERAL. N.F.M.D. Ltd. Messrs. Blackburn & Main had not at the end of the month received a reply to their letters sent to the Ministry of Supply, with regard to the payable Order for £3009. 4. 4. referred to in the Sept. Report. Copies of all correspondence have been sent to Head Office during the month. From years of experience with N.F.M.D. and the Ministry of Supply and their methods, I am doubtful whether we shall succeed in getting more out of them and being a Government controlled party, there would appear to be little hope of the V.M. Co. succeeding in any action which might be taken to the Courts. Fighting the Government on a matter legally, even when the prosecutor has a strong case, is an expensive matter, and should the prosecutor be successful the expense is likely to be heavy. This matter is in the hands of the Company's solicitors and I can only express a laymen's opinion.

Income Tax. This matter is being dealt with by the Auditors. During the month Mr. Hutchinson, of Messrs. Greaves & Co., sent me a letter for information which the Inspector of Taxes required. It was not difficult to answer his queries and to produce evidence in writing. I do not consider there is anything to worry about re: the question of Income Tax.

Aerial Ropeway. We have been constantly writing both Mr. Reg. H. Pearson, and later Mr. T. H. Davies, with regard to the disposal of the Ropeway, and copies of the correspondence have been sent to Head Office. We are writing other firms. The present outlook is not bright, but we shall continue contacting all likely purchasers.

County Council & New Road. During the month we have heard nothing further from the County Surveyor, neither have we received a plan. No doubt this matter will come up in due course.

Nentsbury Mine.

Prospection from the Winze.

H. Peart & Partners.

80½ ~~81~~ Days worked.

|          | L  | H   | S.F.  | S.M.    | W   | C.F.  | C.M.    |
|----------|----|-----|-------|---------|-----|-------|---------|
| Drift E. | 27 | x 7 | - 189 | - 17.56 | x 5 | - 945 | - 26.76 |

Tonnage to Mill:- NIL.

|                        |      |
|------------------------|------|
| Wages Paid £56. 13. 8. | s.d. |
| Cost per Cu.M.:- 42/4. |      |

---

Rodderup Mine.

Prospection in Flats South of Rodderup Vein.

G. Robinson & Partners.

61 Days worked.

|          | L  | W   | S.F. | S.M.   | H.  | C.F.  | C.M.    |
|----------|----|-----|------|--------|-----|-------|---------|
| Drift A. | 14 | x 6 | - 84 | - 7.80 | x 7 | - 588 | - 16.65 |
| " B.     | 11 | x 6 | - 66 | - 6.13 | x 8 | - 528 | - 14.95 |
| " C.     | 12 | x 5 | - 60 | - 5.57 | x 8 | - 480 | - 13.59 |

1596 - 45.19

Tonnage to Mill:- NIL

|                        |                        |
|------------------------|------------------------|
| Wages paid £42. 19. 1. | Cost per Cu.M.:- 19s/- |
|------------------------|------------------------|



## October 1946

194

## COMPARATIVE STATEMENT.

## COMPARATIVE STATEMENT.

✠.....Nentsbury .....✠ Rodderup .....✠

|           |      |               |      |
|-----------|------|---------------|------|
| Nentsbury | .... | Tons in Deads | .... |
| Rodderup  | .... | Tons in Deads | .... |

Wages paid per Cubic Metre in Headings as suggested in your letter of 3rd June, 1932.

Nentsbury

|  |        |  |
|--|--------|--|
|  | Mos Av |  |
|  | Mos Av |  |

| MONTH     | Cubic Metres | Cost per C.M. | Cubic Metres | Cost per C.M. |
|-----------|--------------|---------------|--------------|---------------|
| January   |              |               |              |               |
| February  |              |               |              |               |
| March     |              |               |              |               |
| April     |              |               | 112          | 20/-          |
| May       |              |               | 136          | 17/-          |
| June      |              |               | 63           | 16/4          |
| July      |              |               | 43           | 17            |
| August    | 20           | 15            | 56           | 30/5          |
| September | 14           | 56/10         | 25           | 30/10         |
| October   | 45           | 12/-          | 45           | 19/-          |
| November  |              |               |              |               |
| December  |              |               |              |               |

## Report on the Nenthead Mines November 1946

R E P O R T  
 @@@@@@@@@@  
 on the  
 N E N T H E A D   M I N E S  
 @@@@@@@@@@   @@@@@@@@@@  
 N O V E M B E R, 1 9 4 6.  
 @@@@@@@@@@   @@@@@@@@@@

---

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------|------------------|------------------|----------------|
| Ore mined         | Nil.              | Occupied         | 20 Tons          | 20 Tons        |
| Ore milled        | "                 | by<br>N.F.M.D.   | 20 "             | 20 "           |
| Pb. Concs. prdcd. | "                 |                  | 0.75 "           | 0.75 "         |
| % Recovery        | "                 |                  | 3.75 %           | 3.75 %         |
| Hours worked      | "                 |                  | 5 hours          | 5 hours        |
| Tons per hour     | "                 |                  | 4 tons           | 4 tons         |
| Tons in stock     | "                 |                  | Nil.             | Nil.           |

---

### STOCKS.

|                              | <u>Nentsbury</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------------------|------------------|------------------|------------------|----------------|
| Crude Ore                    | Nil.             | Nil.             | 2500 Tons        | 2500 Tons      |
| <u>Galena</u> , at Rodderup, |                  | 5.75 Tons        |                  |                |
| <u>Witherite</u>             |                  | Nil.             |                  |                |
| <u>Fluor Spar</u>            |                  | Nil.             |                  |                |

---

### Compressed Air

produced at Nenthead, from Water Power, 300 cu.ft. per minute at 90 lbs. pressure per sq. inch at ~~xx~~ Nenthead, and about 80 lbs. pressure in Nentsbury Mine.

produced at Rodderup, from Water Power and Electricity approximately 550 cu. ft. per minute at 85 lbs pressure per square inch at points A, B, and C, and for pumping.

---

## **NENTHEAD MINES NOVEMBER 1946**

NENTSBURY MINE. Prospecting from the Winze: - The X-Cut driven in an Easterly direction, and turned slightly South at about 30 feet, to avoid the influence of Treloar Vein, was driven to a total distance of 80 feet. At that point, a small branch or vein about 6 inches in width, was cut. This was bearing E.N.E. by W.S.W., and carried some good Blende and a small percentage of Galena. The cutting of this small vein was perplexing, as it was bearing just the same as "T" Vein, and bore no relation to the bearing of Dupont Vein, as seen in the Great Limestone above. After consideration, I decided to cease driving in this direction, but left the working open so that work could be resumed there at any time, if desired. I brought the miners back about 40 feet, and set them to drive in an Easterly direction (almost due East) on the South side of "T" Vein. At the end of the month, this new East X-Cut had been extended 51 feet from the X-Cut N. from the Winze. If the distances in the Quarry Hazel are the same as in the Great Limestone between the Cox Vein and Dupont Vein, we should cut "D" Vein at or about 60 feet. The strata in the Quarry Hazel is unusually disturbed, and owing to the influence of so many veins bearing both N. to S. and E. to W., it is almost impossible to diagnose where the veins are likely to be. We are pressing the work planned, with as much speed as is possible with the labour at our disposal.

MILL. In good condition.

RODDERUP MINE. During November, we got a rock-drill miner, and rather better progress was made in points, "A" "B" and "C", and particularly in points "A" and "C". The rock which for months had been extremely hard, became softer and the yield of Galena improved, although, as broken it was not payable. I decided after inspection, to have the best of the ore picked and sent to the Mill. It was not easy to select the ore as the Galena was disseminated throughout about 3 feet of the Flat.

The ore also showed signs of spreading in an Easterly and Westerly direction, which I consider is encouraging. Towards the end of the month, I gave instructions for 20 tons of the ore to be milled, to determine the actual percentage of recovery. It worked out at 3.75%. I am doing my utmost to get a man or two more, as with, say, 60 to 80 tons weekly, even if recovery was only 4% we could meet costs at Rodderup. The outlook is encouraging - more, I am unable to report.

MILL. In fair running condition.

### SALES.

Lead Ore. None sold.

Gravel. 3Tons sold, yielding 13s/6d.

GENERAL. N.F.M.D. All particulars, and copies of correspondence, in regard to Messrs. Blackburn & Main's communications with the Ministry of Supply (N.F.M. D. Ltd), have been sent to Belgium. I can add nothing to what I have given in previous correspondence. I am of the opinion that the V.M. Co. will not

receive more than the £3009. 4. 4. and Tax Vouchers, from N.F.H.D., who through the Ministry of Supply, requisitioned Rampgill Mill and the gravel dumps, and prevented us checking any weights or calculations of the quantity taken monthly, and who have admitted a mistake of 51,000 tons, for which they have apologised to the V.M. Co. My personal opinion is that the bad management during the period in which they operated, from July 1943 to Dec. 1945, was responsible for both miscalculations and mistakes. To waste money fighting the Government, even if the Company won the case, and I am confident they would, would mean as much in costs as we were likely to win. Since the end of November, Head Office has instructed us to accept the cheque, and Messrs. Blackburn & Main will deal with this in December in an effort to arrive at a settlement by the end of the year.

Income Tax. Communications from H.M. Inspector of Taxes received, have been sent to Messrs. Greaves & Co., Newcastle, (our Auditors), for their attention, as they have all the necessary particulars and documents. Aerial Ropeway. have written each of the Companies, suggested by Mr. T. H. Davies, in turn, and have sent copies of the correspondence received up to the end of November, to Head Office.

County Council. During November, we received no further communications or any plan from the County Council with regard to the proposed new road across part of the Company's property near Rampgill Mill.

I regret the delay in sending this Report. It is due to the multiplicity of work re: the mines, correspondence with solicitors and others, and interviews.

NENTSBURY MINE.

Prospection from the Winze.

H. Peart & Partners.

75 Days worked.

|             | L  | H   | S.F. | S.M.   | W   | C.F.         | C.M.           |
|-------------|----|-----|------|--------|-----|--------------|----------------|
| X-Cut Drift | 8  | x 7 | - 56 | - 5.20 | x 5 | - 280        | - 7.93         |
| Drift E.    | 7  | x 7 | - 49 | - 4.55 | x 5 | - 245        | - 6.94         |
| "T" Drift.  | 12 | x 7 | - 84 | - 7.80 | x 5 | - <u>420</u> | - <u>11.89</u> |
|             |    |     |      |        |     | <u>945</u>   | - <u>26.76</u> |

Tonnage to Mill:- Nil.

Wages Paid: £52. 16. 3.

Cost per Cu.M.:- 39/1.

RODDERUP MINE.

Prospection in Flats South of  
Rodderup Vein.

J. W. Robson & Partners.

94 Days worked.

|          | L  | W   | S.F. | S.M.   | H.  | C.F.         | C.M.           |
|----------|----|-----|------|--------|-----|--------------|----------------|
| Drift A. | 15 | x 6 | - 90 | - 8.26 | x 8 | - 720        | - 20.39        |
| " B.     | 10 | x 5 | - 50 | - 4.64 | x 8 | - 400        | - 11.33        |
| " C.     | 16 | x 6 | - 96 | - 8.92 | x 7 | - <u>672</u> | - <u>19.03</u> |
|          |    |     |      |        |     | <u>1792</u>  | - <u>50.75</u> |

Tonnage to Mill:- 20 Tons

Wages Paid:- £68. 18. 4.

Cost per Cu.M.:- 27/2.

## Report on the Nenthead Mines December 1946

### REPORT @@@@@@@@@@@@@@@@

on the

### NENTHEAD MINES @@@@@@@@@@@@@@@@ @@@@@@@@@@

DECEMBER, 1946.  
@@@@@@@@@@@@@@@@ @@@@@@

---

|                           | <u>Nentsbury.</u> | <u>Rampgill.</u>        | <u>Rodderup.</u> | <u>Totals.</u> |
|---------------------------|-------------------|-------------------------|------------------|----------------|
| Ore Mined                 | Nil.              | Occupied by<br>N.F.M.D. | 20 Tons          | 20 Tons.       |
| Ore Milled                | "                 |                         | 20 "             | 20 "           |
| Pb. Concs. Prdcd.         | "                 |                         | 6.700 "          | 6.700 "        |
| % Recovery                | "                 |                         | 3.50%            | 3.50%          |
| Hours <del>x</del> worked | "                 |                         | 5 hours          | 5 hours        |
| Tons per hour             | "                 |                         | 4 Tons           | 4 Tons         |
| Tons in stock             | "                 |                         | Nil.             | Nil.           |

---

### STOCKS.

|           | <u>Nentsbury.</u>                | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------|----------------------------------|------------------|------------------|----------------|
| Crude Ore | Nil.                             | Nil.             | 2500 Tons        | 2500 Tons      |
|           | <u>Galena</u> at Nentsbury, Nil. |                  |                  |                |
|           | " Rodderup, 6.45 Tons            |                  |                  |                |
|           | <u>Witherite</u> Nil.            |                  |                  |                |
|           | <u>Fluor Spar</u> Nil.           |                  |                  |                |

---

### COMPRESSED AIR

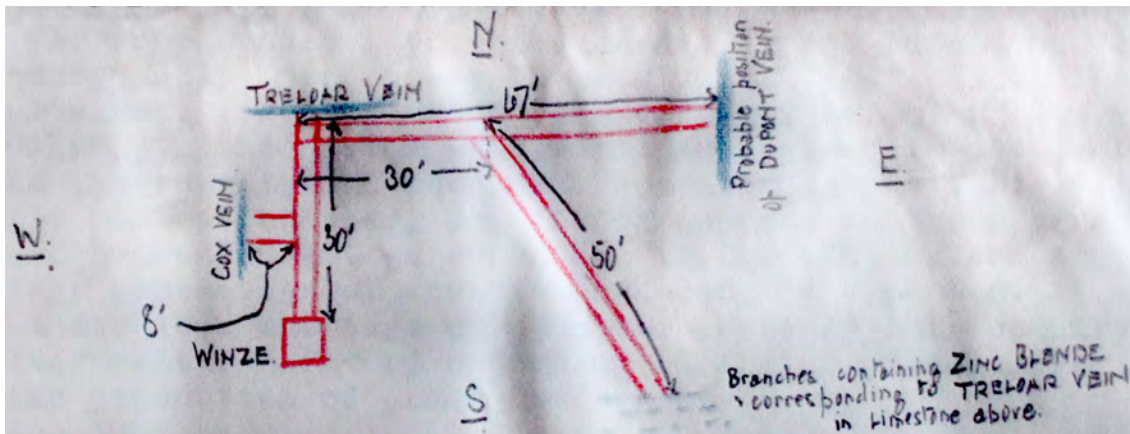
produced at NENTHEAD, by Water Power only, 300 cu.ft. per minute at 90 lbs pressure per square inch at Nenthead, and about 80 lbs pressure per square inch in NENTSBURY Mine.

produced at RODDERUP by Electricity and Water Power about 550 cu. ft. per minute at 95 lbs pressure at the Engine Room and 85 lbs pressure per square inch at points "A" "B" and "C", and for pumping.

---

## NENTHEAD MINES DECEMBER 1946

NENTSBURY MINE. Prospecting from the Winze: During December, the drive almost due East to cut Dupont Vein was extended from 42 feet, measuring from the West Wall of the X-Cut N. from the Winze, to 67 feet, equal to a monthly advance of 25 feet. The following sketch, not to scale, will indicate the work done, and the position of Cox Vein, which, although not definitely defined, we assume may be Cox Vein.



From the assumed position of where Dupont Vein should be is shown from measurements taken from the relative positions of "C" and "D" Veins in the Great Limestone. Measurements were taken December 31st 1946, and the disturbance of the strata at the 67 feet end of the X-Cut almost due East, was referred to in the Weekly Report for week ending Dec. 31st 1946, posted last week to Head Office and Mons. Chaplain. As stated in the Weekly Report, we shall continue driving East for a month or two to prove whether Dupont Vein exists in the Quarry Hazel. I can only reiterate that on Dec. 31st at the end of the 67 feet Drift, the South Wall of "T" Vein was broken and it was difficult to state whether "T" vein exists as far East. If "T" vein does exist, then it is probably that a split occurred in "T" Vein, part of which continues farther East than was seen in the Great Limestone, and the other part was thrown South, where it was mined in the Great Limestone. The fissures cut in the end of the 80 feet drive, which was diverted South and which contained Zinc Blende, about corresponds with the "T" Vein mined in the Great Limestone and which was payable. The distortion of the strata in the X-Cuts and drives in the Quarry Hazel, up to Dec. 31<sup>st</sup>., are most confusing. Further information, I hope to add in a Supplementary Report to the Annual Report for 1946, which will be posted before the end of January.

MILL. In good condition.

RODDERUP FELL MINE. During December, the general position in points "A", "B", and "C", showed an improvement towards the end of the month, in points "A" and "C", and particularly in "C", where the top 4 feet of the Tynebottom Limestone yielded payable ore and the outlook was encouraging. Towards the end of the month, a small fissure bearing N.E. by S.W. cut out the Iron Pyrites



and the quantity of Galena improved, but not sufficient to make point "A" payable.

The fissure cut in point "C", which improved the deposition of Galena there, should be cut in point "A", very soon, and most likely there will be an improvement in point "A". We are confining our drivage mostly to points "A" and "C". In point "B" there was a small percentage of Galena. Here the strata is broken, and as at this point we are in the bottom of the Tynebottom Limestone and the strata seems to be dipping to the South, it is possible that by driving South, the mineralisation should improve.

MILL. In good condition. A small test quantity of 20 tons of ore, was milled during December. The recovery was 3.50% I estimate that the actual percentage would be about 4% as we have only reported what was recovered and weighed, and have not included a small quantity of Slime Concentrates which is in circulation, but which cannot be calculated correctly.

LABOUR. Our main difficulty is shortage of labour.

Applications made to the Labour Exchange at Alston, has been of no avail, not because the Manager will not help us, but because he has no men registered in his books as wanting employment. For some months labour has been free and cannot now be directed. Consequently, men choose the employment they wish. The V.M. Co. pays its employees the Union rate of wage, but other industries working in the Alston area, some subsidised in the past by the British Government, and who have been able to put their increased costs on the Consumer, or, if for export, on the consumer countries, have had an advantage over the V.M. Co. In England at present, a large percentage of that is produced, is exported. Consequently, there is a shortage of consumer goods in this country, and as the Government benefit by exporting at a high price, priority is given to the production of goods for export.

Towards the end of the year, and being unable to obtain British labour, I asked the Manager of the Labour Exchange at Alston, to try to obtain Polish refugee labour for us. German prisoner-of-war labour in this district, is employed on farms, and as these men are being repatriated monthly, the time is approaching when prisoner labour will not be available. The reduction in weekly working hours, and the frequent holidays on full pay, is also reducing output considerably and as a result the coal supply is not sufficient for this country's consumption. Consequently, several of the cotton mills and steel factories and various other industries have closed or are partly closed, and the number of trains reduced. We are doing all we can to obtain more labour.

SALES.

Lead Ore. None sold.

Gravel. 301.25 Tons of Stone and Gravel sold. The price per ton for Stone was 2/-, and for gravel 5/- per ton. The nett yield was £38.4

GENERAL. N.F.M.D. Copies of all correspondence with N.F.M.D., have been sent to Head Office. On instructions from Head Office that we were to accept the sum of £3009. 4. 4. and Tax Vouchers from N.F.M.D., Messrs. Blackburn & Main were instructed to negotiate for a settlement. They considered that as, the cheque had to be returned for amendment to the Ministry of Supply, they should



make another attempt to obtain the expenses of £78. 15. 0. as recommended by the Mineral Valuer. Messrs. Blackburn & Main have not heard anything from the Ministry or from N.F.M.D. up to Dec. 31st.

No doubt, at least the cheque for £3009. 4. 4. will be forthcoming soon, and will, of course, be credited to 1946 accounts. Some adjustment will have to be made to the Balance Sheets for 1946, and possibly for 1945, by the Auditors, as we calculated that N.F.M.D. would have paid 6d per ton for the estimated monthly tonnages supplied by them during 1943/44/45, The deduction of 51,000 for which they apologised for making a mistake, will have to be taken into consideration.

Income Tax. All matters re: Income Tax are being dealt with by Messrs. Greaves & Co.

County Council. No plans have been received from the County Council re: the road to Overwater, and no correspond has passed between the Company and the County Council.

NOTE. As and from Jan. 1st 1.947, the prices of Lead and Zinc were raised from £55 to £70 per ton, and all purchasing licences not fulfilled by Jan. 1st 1947, are at the new prices.

Aerial Ropeway. Copies of all correspondence with the firms to whom we have offered the ropeway for sale have been sent to Head Office. No progress has been made in this matter, although the plant has been advertised and we have written to firms suggested to us by Mr. T. H. Davies, the Aerial Ropeway Consultant.

NENTSBURY MINE.

Prospection from the Winze.

A. Teasdale & Partners

96 days worked.

|          | L  | H   | S.F.  | S.M.    | W.  | C.F.  | C.M.    |
|----------|----|-----|-------|---------|-----|-------|---------|
| E. Drift | 25 | x 7 | - 175 | - 16.25 | x 5 | - 875 | - 24.77 |

Tonnage to Mill:- Nil.

Wages paid £67: 12: -.

Cost per Cu.M.:- 54/7.

---

RODDERUP MINE.

Flatts South of Rodderup Vein.

J. W. Robson & Partners

82 Days worked.

|         | L  | W    | S.F.  | S.M.    | H   | C.F.        | C.M.           |
|---------|----|------|-------|---------|-----|-------------|----------------|
| Flatt A | 12 | x 11 | - 132 | - 12.26 | x 7 | - 924       | - 26.16        |
| " B     | 6  | x 6  | - 36  | - 3.34  | x 8 | - 288       | - 8.15         |
| " C     | 15 | x 6  | - 90  | - 8.36  | x 7 | - 630       | - 17.84        |
|         |    |      |       |         |     | <u>1842</u> | <u>- 52.15</u> |

Tonnage to Mill:- 20

Wages paid £59. 8. 10.

Cost per Cu.M.:- 22/9.

**ANNUAL REPORT  
On the  
NENTHEAD MINES  
1946**

NENTHEAD. At Nenthead, during 1946, Messrs. Non-Ferrous Mineral Development Ltd., on whose behalf the Rampgill Mill and Nenthead Dumps were requisitioned in July had not de-requisitioned the Mill and Dumps by the end of the year. No work was done by this firm after Dec. 31<sup>st</sup> 1945, but a considerable amount of their machinery still remains in the buildings. Rent, in respect of the premises, on the basis of £200 per annum, has been paid to Dec. 25th 1946. In a letter dated August 28th 1946, Mr. W. C. C. Rose, Director and secretary of N.F.M.D., stated that the property (Rampgill Mill and Dumps) would shortly be released from the Requisitioning Order, but nothing further has been heard in this respect.

In the Annual report for 1945, totals of tonnages of Dump material treated by N.F.M.D. during the years 1943-4-5, were given based upon the Approximate, or "preliminary" figures supplied to us monthly by N.F.M.D. These figures, which were checked by our Auditors and officials of Greenwich Hospital Estates, from the statements supplied to us. gave a total of 614,184 Tons of Dump material treated, from which 19,316.8813 Tons of Zinc Concentrates, assaying about 57.5, Zn. and 1,428.8207 Tons of -Lead Concentrates, assaying about 71.8% Pb., were recovered. The tonnages of Concentrates produced have not been disputed by N.F.M.D. but N.F.M.D. have not recognised the tonnage of Dump material treated, as correct, a resume of the correspondence in this connection being as follows: -

Jan. 22<sup>nd</sup>. We submitted to N.F.M.D. a claim for £15,354. 12. 0. Compensation in respect of 614,184 tons of Dump material at 6d per ton, less £12,000 received on a/c. leaving a balance of £3,354. 12. 0. due to the V.M. Co.

Feb. 6<sup>th</sup>. N.F.M.D. acknowledged receipt of claim.

Feb. 27th. N.F.M.D. wrote the V.M. Co., that they had made a mistake in their calculated weights which amounted to 51,219 Tons.

This revision of tonnage, we were not prepared to accept, without contest, and correspondence ensued between ourselves, Messrs. Blackburn & Main, and N.F.M.D. Ltd., from February up to September 24<sup>th</sup> when the Ministry of Supply sent us a Payable Order for £3009. 4. 4. With a Tax Reduction Certificate for £694. 12. 0., in settlement of our claim for compensation and Royalty due. The amount paid in respect of Royalty was correct, but the amount in respect of compensation for dump material was based on the revised tonnage, Head Office agreed, when it appeared that only a law suit could next be proceeded with, which might prove more costly than the amount at stake, to accept the amount paid as in full settlement of the compensation due, with a proviso to make a further endeavour to obtain the amount of £78. 15. 0. As Expenses, which were recommended by the Mineral Valuer. This was in early December, and beyond an acknowledgement, no reply has yet been received from the Ministry, and while Mr. MacPhail, the senior member of Messrs. Blackburn &

Main, considers that we may regard the £3009. 4. 4. As certain to be paid, the question of the payment of the expenses would remain doubtful until we heard from either N.F.M.D. or the Ministry of Supply. The Mineral Valuer, in a letter to Mr. MacPhail in December, confirmed his recommendation of July 1945, for the payment of £78. 15. 0. As expenses.

Of the £3009. 4. 4. Which we may confidently expect to receive from the Ministry, £2160. 4. 7. Will remain as the V.M. portion after paying the respective amounts of Royalty due to Greenwich Hospital Estates (Admiralty) and Lord Allendale, on the concentrates produced by N.F.M.D. Although this amount has not yet been paid, I estimate that when it is paid, there will be a bank balance available to the Company as at Dec. 31<sup>st</sup> 1946, after paying all known expenses and allowing for probable charges relating to 1946, amounting to £13,000 and probably slightly exceeding this. This is the amount which I estimated we should have, in a letter to Mons. Chaplain, dated Nov. 2<sup>nd</sup>.

Of the outstanding accounts, most of these are known, with the exception of the amount of Income Tax we may have to pay. This matter is in the hands of our Auditors, Messrs. Greaves & Co., who have been unable as yet to reach agreement with the Inspector of Taxes, probably owing to the fact that no settlement has yet been agreed between the V.M. Co. and N.F.M.D. The originals or copies of all official correspondence in connection with the dumps, are held by Messrs. Blackburn & Main, Messrs. Greaves & Co., and H.M. Inspector of Taxes, in addition to copies which have been sent to Head Office.

Regarding the question of the disposal of the Arial Ropeway at Nenthead, as recommended by Head Office in 1945, this matter has received considerable attention without, unfortunately, any tangible result being achieved up to the present. We advertised the plant for sale, in the Spring, in a periodical called "The Machinery market" which has a large circulation in mining and colliery circles, as well as in the engineering industries and building trades etc. No applications were received, and later a Ropeway Engineer, Mr. Reginald H. Pearson, offered to assist the V.M. Co. in this matter. He also advertised the Ropeway, in the "Irish Times" the only national daily paper in which space could be found, but without success. Mr. Pearson then prepared a report on the Ropeway, while we wrote to four ropeway firm, recommended by another Ropeway consultant, Mr. T. H. Davies. Nothing developed from this activity, but two of the firms stated that they would contact us again if they ever found an opportunity to utilise our plant.

#### NENTSBURY.

In the Report on the Nenthead Mines for the period from January 1st 1946 to June 30th 1946, full detailed particulars were given concerning our objects and activities in relation to Nentsbury Mine. I do not propose to cover that period in detail again now, but to deal in detail with the work done in Nentsbury from the time the water was pumped out of the Winze, that is from July 1st 1946 to Dec. 31st 1946, and the final summary will include the first and second half years' report and approximate expenses.

#### Prospecting from the Winze:

Prospecting in the Quarry Hazel, from bottom of the Winze, commenced in July. The program was arranged to cut the Treloar Vein, and East and West Vein, first, with the object of ascertaining the true position of this vein, and then to calculate to some extent, the probable position of Cox (C) Vein, and if found the probable position of Dupont (D) Vein.

"T" Vein was cut in July, and contained Blende in the floor and mainly Witherite in the roof. Immediately "T" Vein was cut, we commenced to drive slightly South-East and expected to cut "C" Vein in, from 15 to 18 feet. By the end of August, we had driven this X-cut 30 feet from the West Wall of the X-Cut N. which cut Treloar Vein, without locating, "C" Vein, and we decided to drive a short X-Cut W. from the X-cut N., and at 8 feet we cut a small vein or fault, bearing North by South. We continued driving this X-cut W., to a length of 16 feet from the East Wall of the X-cut N., but found no mineral of value. Dr. K. C. Dunham, of the Geological Survey, who checked my bearings, concluded that what we had cut should probably be Cox Vein. If this is so, this Vein is not mineralised in the Quarry Hazel.

It was then decided to continue the X-cut and to bear South to avoid the influence of "T" Vein, which had dislocated the strata. By the end of September, the X-cut had been driven 45 feet, and we expected to cut "D" Vein in October, if "D" and "C" veins maintained in the Quarry Hazel the respective positions they held in the Great Limestone Stratum. By the end of October, the S.E. X-cut had been driven 69 feet from the West wall of the X-cut N. to Treloar Vein. Small strings containing Blende were cut, but it was not possible to regard these as Dupont Vein. Having failed to cut "D" Vein after extending the X-cut S.E. to 80 feet, we decided to retreat to a point 30 feet from the X-Cut and then drove almost due East, keeping "T" Vein on the North side. At the end of the year, this X-cut continuing almost due East, had been driven a total of 67 feet from the West Wall of the X-Cut N. The strata is disturbed in this area but one thing is certain, viz: -  
that up to Dec. 31st, although we had driven the distance anticipated to find "D" vein, I regret to state that we have not found it.

In the Report for 1945, I gave details for a Diamond Drilling programme, expecting that I would have been able to purchase or hire a Diamond Drill, but I regret having to report that all my efforts in this direction failed, mainly and probably wholly, because of the priority given to the Coal mining industry, and I could not obtain a drill. Although it has taken much longer, we have actually carried out the programme outlined for 1946, namely to cut "T" first, and then "C" and "D" veins. We cut the former, and we cut what is presumed to be "C" vein, although it is not mineralised, and at the end of 1946 we should have been near cutting "D" vein. The results for driving will be referred to under "Recommendations for 1947" in a subsequent paragraph.

There was no production of Lead Ore at Nentsbury during 1946.

Nentsbury Mill was operated and maintained by Messrs. Jas. H. Harrison up to July 31<sup>st</sup> 1946, at the rent of £500 per annum. The rent due to the V.M. Co. on this basis was paid, and the Mill handed over to us in good condition.

Costs for 1946. The total costs for the half year ended June 30th 1946, for Nentsbury was given as £778. To this we added half the administrative charges (management, offices, property upkeep, etc.) amounting to an estimated figure of £16603, less £375 revenue from rents etc., that is £1288. The other half of 1288 would be borne by Rodderup, both places bearing 50% of these charges. The total expense for Nentsbury for the first six months, estimated as closely as possible, was therefore £778 plus £644 (half of £1288), that is, £1422.

The cost of the second six months is approximately as follows: -

|                      |              |
|----------------------|--------------|
| Stores and Purchases | £115.        |
| Haulage              | 9.           |
| Labour               | 628.         |
| Insurances           | 40.          |
| Rates                | <u>23.</u>   |
| Total direct charges | <u>£815.</u> |

|                                                   |             |
|---------------------------------------------------|-------------|
| Plus 50% of Administrative Charges<br>(See below) | <u>734.</u> |
|---------------------------------------------------|-------------|

|                              |        |
|------------------------------|--------|
| TOTAL FOR SECOND SIX MONTHS. | £1549. |
|------------------------------|--------|

|                                  |               |
|----------------------------------|---------------|
| Plus First Six Months (as above) | <u>£1422.</u> |
|----------------------------------|---------------|

|                               |               |
|-------------------------------|---------------|
| ESTIMATED TOTAL COST FOR 1946 | <u>£2971.</u> |
|-------------------------------|---------------|

#### ADMINISTRATIVE COSTS

|                        |             |
|------------------------|-------------|
| Property Upkeep        | £236.       |
| Legal Expenses         | 28.         |
| Car Hire, etc.         | 90.         |
| Staff, Offices, etc.   | 915.        |
| Rents, Wayleaves, etc. | 75.         |
| Donations & Gratuities | 253.        |
| Rates, Income Tax etc. | <u>100.</u> |
| Total for six months   | £1697.      |

|                     |            |              |
|---------------------|------------|--------------|
| Less Rents received | £179.      |              |
| Sundry Sales        | <u>50.</u> |              |
|                     |            | <u>£229.</u> |

|                                     |                                  |
|-------------------------------------|----------------------------------|
| NETT COSTS FOR SECOND SIX MONTHS: - | £1468 (50% charged to Nentsbury) |
|-------------------------------------|----------------------------------|

|                       |                                         |
|-----------------------|-----------------------------------------|
| Plus First Six Months | <u>1288.</u> (50% charged to Nentsbury) |
|-----------------------|-----------------------------------------|

|                         |               |
|-------------------------|---------------|
| TOTAL ESTIMATE FOR 1946 | <u>£2756.</u> |
|-------------------------|---------------|

### Recommendations for 1947

On November 2<sup>nd</sup> 1946, I wrote to Mons. Chaplain re: recommendations for 1947, and gave an estimated expenditure of £8000 if we carried out a similar programme in 1947 as we did in 1946. On November 27<sup>th</sup>, I received a note from Monsieur l' Administrateur Directeur General, that work could be continued during 1947, conditionally that expenditure did not exceed a total of £8000.

I have given careful consideration to the programme for 1947 in regard to Nentsbury Mine. I feel it is necessary to point out that up to the end of December 1946 we have not been successful in cutting any payable ore in the Quarry Hazel. If we fail to do so early in 1947, I consider that in the interest of the V.M. Co. we should try to mine Lead Ore in such places as ore is likely to be found even if only in small quantities, above the main level in the Great Limestone, and thus try at least to reduce expenditure.

The main reason for this suggestion is that we have only a small labour force, and at present we cannot continue prospecting and producing if we fail to cut payable ore in the prospecting area. With a larger force, we might be able to continue prospecting with, say, the present staff and employ a small staff, to produce small tonnages of ore from such places in the mine as might appear to be payable. With the object in view, I instructed the foreman of mine, when owing to frost, compressed air was not available from the 6th to the 18th January 1947 to inspect and report to me in writing, all parts of the mine, accessible from the Main level and in the Great Limestone, where, in his opinion, payable ore existed. The labour outlook in this country at present and for the immediate future is so obscure that I consider the V.M. Co. would be well advised to mine any ore payable with lead at £70 per ton, rather than continuing to employ the only labour force available on prospecting with no tangible results.

The foreman has reported that there are three points accessible which will not entail heavy transport charges to the main level, and which, if he is correct, should meet the costs of all Mining and Milling. It is true the tonnage in sight is not large, but in one place there is a possibility of a good quantity of ore if the value in sight continues. I have not yet inspected these places but shall do so at the earliest opportunity, on the assumption that we may not be successful in discovering ore in the Quarry Hazel. Attached is a tracing of Nentsbury Mine showing where the mine foreman reported ore, which if it exists and continues, should be payable. A further note respecting these points will be sent to Head Office and Mons. Chaplain after I have inspected the mine. Should Lead Ore, in payable quantity be available, and until Nentsbury Mill is put in order in regard to water power or some other arrangement made, any ore brought out of the mine, could be stored outside or transported to Rodderup to be crushed and dressed there.

### RODDERUP

Mine. The report dealing with the first six months of 1946, having been previously submitted to Head Office and Mons. Chaplain, the detailed part of this present Report will deal with the period July 1<sup>st</sup> to December 31<sup>st</sup> 1946, and the final summary will contain the year's output and estimated costs.

During the second half of 1946, the total labour force employed in the mine, including the foreman, was 5, with the transport driver working only odd days monthly, except when his horse was employed. Consequently, with the main level and shafts underground to maintain, very little development work could be done. Work was confined to three points, A. B. C., on the South side of Rodderup Vein, where three drifts were put out into virgin ground. Only one skilled rock-drill miner was employed and even he, although receiving the agreed Union rate of wage and encouraged by bonus awards, left our employ eventually, with the result that for a time, the foreman had to operate the rock drill. Towards the end of the year we secured the services of a skilled rock-driller who had been employed and trained by us previous to being conscripted for military service, and this restored the labour force to the origin five, with the occasional assistance of the horse driver. We made repeated applications to the Labour Exchange for more skilled labour but none was available. Late in the year we applied for permission to employ Polish miners in this country at present, but up to December 31st our endeavours had not met with any success.

Work was continued in the three points, A., B., C., in the Tynebottom Limestone but not until the end of the year, did any of the places yield payable ore, and then points A. and C. improved and we milled, during November and December, small parcels of ore totalling 40 tons, from which we produced 1.45 tons of Lead Concentrates, equalling a recovery of 3.525%.

The total tonnage mined and crushed during 1946, was 665 tons, from which 29.45 tons of lead concentrates were recovered, giving a recovery of 4.428%.

In addition to the concentrates recovered from the mine ore, 11.642 tons of Concentrates were recovered from Slime Tailings, making a total recovery for the year of 41.092 ton. Stock brought forward from 1945 was 1.650 tons, making a total of 42.742 tons of Concentrates, of which 36.292 tons were sold, leaving a stock in hand on Dec. 31st 1946 of 6.450 tons.

Ore Reserves. I am unable to compute any ore reserves. The work done has not been sufficient, owing to shortage of skilled labour, to justify making a statement. The Standing Charges are out of all proportion to the production, and we cannot reduce these and, at the same time, maintain the agency. Everything in connection with the mines must be done as hitherto, and will have to be done if the mines are to be maintained in accordance with the terms and conditions of the leases. The solution is labour, and particularly skilled labour, underground the force underground, even with a low grade ore, would meet expense.

I cannot change the opinion expressed in the 1945 Report, viz: that I am confident there is a reasonable prospect of developing payable ore in the area, and particularly with a price of £70 per ton. I consider there is every prospect of meeting costs, but only if we can obtain a reasonable labour force. Since the end of 1946 I have been informed by the Manager of the local labour Exchange that there is a prospect of Polish labour being available for us. There is a camp at Penrith but the V.M. C. would have to transport from the camp by motor-car or lorry, and return them in the evening. I am arranging, as soon as



possible, to visit the camp and discuss the matter with the Officer Commanding the Camp, with the object of coming to some arrangement, if such is possible.

I can only state that, at the end of 1946, the points A. and C. were more encouraging than they have been.

RODDERUP MILL. The Mill has been maintained in reasonable condition.

Approximate Costs. The approximate costs of working Rodderup, including maintenance of the mine and Dressing Floor, upkeep of watercourses and shafts etc., for the six months ended June 30<sup>th</sup> 1946, was given in the six-months Report as £2159, less revenue amounting to £1137, equalled £1022. To this the addition of £644, (half the Administrative Charges etc.) made a total of £1666.

The approximate costs for the second six months are as follows: -

|                                                    |              |
|----------------------------------------------------|--------------|
| Stores and purchases                               | £522.        |
| Haulage                                            | 71.          |
| Labour                                             | 950.         |
| Insurance (employees and machinery)                | 96.          |
| Royalties & Rates etc.                             | <u>29.</u>   |
|                                                    | £1668.       |
| <u>Less.</u>                                       |              |
| 13.1291 Tons Lead Ore, say £400.                   |              |
| Gravel Sales 145.                                  | <u>545.</u>  |
| Total Direct Charges for 2 <sup>nd</sup> Half      | £1123.       |
| <u>Plus</u> 50% Administrative Charges             | <u>734.</u>  |
| TOTAL CHARGES FOR 2 <sup>nd</sup> SIX MONTHS       | £1857.       |
| <u>Plus</u> Charges for 1 <sup>st</sup> six months | <u>1666.</u> |
| TOTAL CHARGES FOR 1946                             | £3523.       |

#### Recommendations for 1947

If labour becomes available, and even if it should not reach the total amount we require, we consider we should work anywhere in the mine, where lead ore is available and likely to meet costs. In other words, and particularly at present, I consider the V.M. Co. would be well advised to recover Lead Ore from any source which did not endanger main levels. With more labour, we can more or less meet costs keep to a program. With insufficient labour, we must consider whether or not we should continue working to points according to plan, whether remunerative or not. All will depend upon the labour force, or upon the discovery of ore of from 8 to 10% Pb.

May I state that in recommending that, in both mine, the Company should consider producing Lead Ore from any parts of the mines which may be considered payable, the object I have considered is that, if it is possible, I would prefer to produce in the form of revenue as much or all of, the £8000 we are permitted to spend in 1947, rather than utilise the Company's capital.

## SALES.

Lead Ore. As previously stated the quantity of Lead Concentrates sold during 1946, amounted to 36.292 Tons. The average price received was approx. £40 per ton at Alston Station.

Fluor Spar. None produced or sold.

Witherite. None produced or sold.

Stone & Gravel. Gravel sales during the second six months of 1946, amounted to 727.60 Tons, which at the usual prices, realised £154. 15. 4. Profit, making a total profit for the year of £271. 7. 4. From the sale of Gravel and Stone.

## GENERAL.

The position to date in regard to the V.M. Co.'s claim for compensation in respect of Dump Material treated by N.F.M.D. has been given in page 1 and 2 of this report. In regard to the premises requisitioned on behalf of N.F.M.D., the rent of £200 per annum in respect of Rampgill Mill has been paid quarterly throughout 1946, the arrears of rent in respect of the period 26th July 1942 to December 25<sup>th</sup> 1945 having been paid in early January 1946. When the property is derequisitioned, a claim will have to be formulated and presented to the Ministry, in respect of the damages suffered by the premises and for the machinery removed from the building follow its occupation by N.F.M.D. This cannot be done legally until the premises are vacated. In regard to sites of the dumps, when these are released from the requisition orders, care will have to be taken before the V.M. Co. accept their return to ensure that under no circumstances shall the V.M. Co. be responsible for any claims or expenses arising at any time in the future from damages caused or attributed to the state and condition of the dumps or their sites, as a result of the activities of N.F.M.D. In both matters we will obtain the advice of the Company's solicitors before taking any definite action.

County Council. During 1946, the Cumberland County Council approached V.M. Co. with the object of constructing a new road in Nenthead, which would traverse the V.M. property adjacent to Rampgill Mill. Head Office agreed, subject to the reservation of the V.M. right to cross the road at any time by either ropeway, tramway, or subway, should mining exigencies require it, to grant permission, provided the lessees of the ground, the Greenwich Hospital Estates, would not penalise the V.M. Co. on the termination of the long lease. This matter is still undecided, no plan having being forwarded by the County Council as promised some months ago.

Rural District Council. The Rural District Council have had under consideration during the year, an expansive plan for improving the district water supplies, and have endeavoured by approaches to the Greenwich Hospital Estates to induce the latter to waive the Water Rights held from the Greenwich Hospital Estates by the V.M. Co., particularly the Priorsdale and Perry Dam area. On being informed by us of the immediate and prospective seriousness to the mining industry generally on Alston Moor, if we or any other mining company were deprived of our water rights, for both power and ore dressing purposes, the Mineral Agents for G.H.E., Messrs. Wm. Armstrong & Son, wrote the Director of G.H.E. advising him to retain the water rights for the V.M. Co. Since the end of

1946, Messrs. Armstrong & Son, have been in contact with me, and I understand that the question is still under discussion. I again stressed the importance of the water supply to the mining industry in the district.

Before closing the Report, I have again to acknowledge with gratitude the help received during the year from Mr. MacPhail, senior partner of Messrs. Blackburn & Main, the Company's solicitors, and from the staff here as a whole, in what has been another trying year.

Nenthead  
29<sup>th</sup> January 1847.

**SUPPLEMENTARY REPORT  
NENTSBURY MINE-PROSPECTING FROM THE WINZE  
JANUARY 29<sup>th</sup> 1947**

In the Annual Report the results of prospecting up to Dec. 31<sup>st</sup> 1946, were given, when the X-cut almost due East was driven 67 feet, with the object of cutting Dupont Vein. The strata at this point was very much displaced.

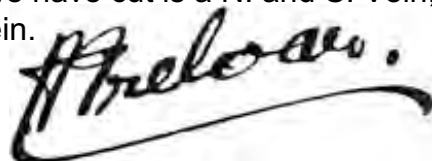
During the first two weeks of January 1947, no driving was carried out, owing to the Water Supply from Perry Dam being frozen. On January 20<sup>th</sup>, work was resumed in the X-cut E., and by Jan 28<sup>th</sup> it had been projected a total of 78 feet from the West Wall of the X-cut N. At 75 feet, a narrow vein, about 6" in width, and bearing N. to S., crossed the X-cut and displaced the strata very considerably. I inspected this vein yesterday, Jan. 28<sup>th</sup>, and it is my opinion that it is the Dupont Vein. It is not mineralised. The X-cut N. has been driven in the Quarry Hazel at a depth of 12 feet below the Plate. The Winze from which the X-cut N. was driven to Treloar Vein, and from which X-cut N. the X-cut E. was driven, is 25 feet in depth, of which the first 23 feet is in Plate, and the final 12 feet in the Quarry Hazle. The small vein, which was intersected by the X-cut E. at 75 feet on Jan. 23<sup>rd</sup>, displaced the strata so much, that on the E. side of the vein, the stratum is Plate.

Consequently, on a rough calculation, the vein has thrown the strata at least 12 feet. On the North side of Treloar Vein, as shown on the Nentsbury Mine Plan, the strata on Dupont Vein was thrown 17 feet, E. cheek up. Between "T" Vein and High Raise Vein, the throw is not stated, but from memory, I consider it was less than 17 feet, and as the Quarry Hazle is visible in the main level, it seems that it was thrown up about 12 feet on the E. side. Between 1<sup>st</sup> Sun Vein and 2<sup>nd</sup> Sun Vein, it was thrown only 3 feet E. side up.

I regret I am forced to consider that "D" vein is not mineralised in the Quarry Hazle, and if "C" Vein is either in the X-cut N. where traces of Blende are visible, or is the small un-mineralised vein cut at 8 feet by the X-cut W. from the X-cut N., then the distance between "C" and "D" Veins in the Quarry Hazle is approximately 75 feet, compared with 60 feet in the Quarry Hazle (Sic).

I have instructed the foreman to drive N. in the Plate on the E. side of the presumed "D" Vein, to prove whether "T" vein exists E. of the small vein. According to Nentsbury Mine Plan "T" Vein was thrown S. about 50 feet when intersected by "C" Vein. It is therefore difficult to understand why "T" vein exists in the Quarry Hazle between the two poor small veins cut in the Quarry Hazle. The small X-cut now being driven N. should prove within a few days whether "T" vein does exist East of the end of the 75 foot X-cut. The small vein cut on Jan. 23<sup>rd</sup>, has a well defined West wall, but on the East side, being in Plate, the wall is not well defined. This is not unusual in Plate. The existence of Plate on the East side, is practically conclusive that what we have cut is a N. and S. Vein, and we are forced to conclude that it is "D" Vein.

This is the position up to yesterday, Jan. 28th



## Report on the Nenthead Mines January 1947

### REPORT

000000000000

on the

NENTHEAD

0000000000000000

MINES

0000000000

JANUARY, 1947.

00000000000000

00000

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|----------------|
| Ore mined        | Nil.              | Occupied         | 40 Tons          | 40 Tons        |
| Ore milled       | "                 | by<br>N.F.M.D.   | 40 "             | 40 "           |
| Pb.Concs. prdcd. | "                 |                  | 1.45 "           | 1.45 "         |
| % Recovery       | "                 |                  | 3.625%           | 3.625%         |
| Hours worked     | "                 |                  | 10 hrs.          | 10 hrs.        |
| Tons per hour    | "                 |                  | 4 Tons           | 4 Tons         |
| Tons in stock    | "                 |                  | Nil.             | Nil.           |

### STOCKS.

|                               | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-------------------------------|-------------------|------------------|------------------|----------------|
| Crude Ore                     | Nil.              | Nil.             | 2300 Tons        | 2300 Tons      |
| <u>Galena</u> , at Nentsbury, |                   |                  | Nil.             |                |
| <u>Galena</u> , at Rodderup,  |                   |                  | 7.90 Tons        |                |
| <u>Witherite</u>              |                   |                  | Nil.             |                |
| <u>Fluor Spar</u>             |                   |                  | Nil.             |                |

### COMPRESSED AIR

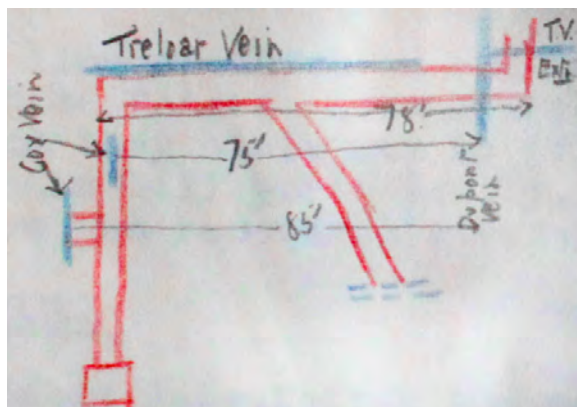
produced at NENTHEAD, by water power only, 300 cu. ft. per minute at 90 lbs pressure per square inch at Nenthead, and about 80 lbs pressure per square inch in NENTSBURY Mine.

produced at RODDERUP, by electricity and water power, about 550 cu. ft. per minute at 95 lbs per square inch at the Engine House, and 85 lbs pressure per square inch at Points "A", "B", and "C", and for pumping.

## NENTHEAD MINES JANUARY 1947

NENTSBURY MINE. Prospecting from the Winze: -

During January, the X-Cut E. was driven to a total length of 78 feet from the West wall of the X-Cut driven N. to Treloar Vein, in the Quarry Hazel. At 75 feet, a narrow vein about 6 inches in width and bearing N. to S., crossed the X-Cut E. and displaced the strata about 12 feet, throwing the East side up and consequently the stratum on the East side was Plate. The narrow vein having a good West wall but a broken East wall in the Plate, was not mineralised. The X-Cut E. was driven from 75 feet to 78 feet. A X-cut was driven N. from the X-Cut E., on the E side of the small N. to S. Vein, assumed to be Dupont Vein, for a distance of 12 feet to prove whether Treloar Vein continued East. "T" Vein was found in the Plate, but was only about 6 inches wide and carried no mineral values. The sketch shown in the margin, indicates the position of this X-Cut driven North.



In the Supplementary Report, appended to my Annual Report for 1946 and dated January 29th 1947, most of the details concerning the position were given. In my monthly report for December, 1946, I stated that the distortion of the strata was confusing. The work carried out in January has, I consider, proved that "D" Vein, in the Quarry Hazel,

is not mineralised. There is a difference in the distance between "C" and "D" Veins in the Quarry Hazel and the distances, assuming that "C" Vein is actually either in the X-Cut N. or the short X-Cut driven West, where the distance is 75 to 85 feet, compare as 75/85 feet in the feet in the Great Limestone. Between the Great Limestone and the Quarry Hazel, the strata is: Tuft, 9, feet, Plate, 16 feet; and Limestone Post, 1.25 feet; a total of 26.25 feet. In these strata, the veins incline very rapidly, and as Veins in the Quarry Hazel had not been seen before in Nentsbury Mine, we had consequently nothing to guide us as to their actual position. The Winze was sunk, 30 feet West from "C" Vein, where worked in the Great Limestone. This position was calculated to allow for the rapid inclination of "C" Vein in the Tuft, Plate and Limestone Post. With no data to guide us, we thought that "C" vein would be cut from 15 feet to 18 feet East of the Winze, hence our driving East in July and August. When the Vein was not found E., we drove about 9 feet West, and there we cut a fault which may be "C" Vein in the Quarry Hazel, or, as there is a little Blende in the roof of the X-Cut N. to Treloar Vein, "C" Vein may actually be in the X-Cut N. from the Winze. The distance quoted above, viz: 75 to 85 feet, which ever point is accepted as the position of "C" Vein in the Quarry Hazel, is the difference between "C" and "D" Veins in the Quarry Hazel. We sent you a copy of a letter dated Oct. 23rd 1946, together with copies of two sections, which we received from Dr. K. C. Dunham of H.M. Geological Survey. These were sent to Head Office and Mr. Chaplain with the Weekly Report for Oct. 31st 1946, and it now seems apparent

that Dr. Dunham did not allow for sufficient inclination West for the Veins in the Tuft, Plate and Limestone Post strata, but again, having no data to guide him, he was assuming that the inclination in these strata would be similar to what was seen in the strata above. In the absence of sufficient data, Dr. Dunham, I consider, could not do otherwise than use the data which was available at the time.

MILL. The mill is in fair condition, except for the damage caused to the aqueduct by a lorry on Jan. 3rd particulars of which and compensation claimed, with copies of correspondence with the County Surveyor, have been sent to Head Office and Mr. Chaplain.

RODDERUP FELL MINE. Except for the week ended Jan. 31st when all roads were blocked by snow and communication between Nenthead and Rodderup, even by telephone, was cut off, point "A" continued to improve, and more ore was visible. The last communication received from the foreman, who walked down to Alston and telephoned to Nenthead, stated that the improvement underground was fully maintained, but owing to the severe weather with heavy falls of snow and hard frost, some of the workmen could not get to the mine and, as a consequence, he was unable to do little more than keep the pumps going and do only occasional drillings. The blizzard which has extended over almost the whole of Great Britain, is stated to be the worst for 50 years. Immediately it is possible, I shall visit Rodderup and go underground.

MILL. In good condition except for the covering of the James Slime Table, the lino of which is bad and will have to be replaced with new as soon as Messrs. Holman Bros., makers of the table, can supply it, which they state may be from 3 to 4 weeks. During January, we ran the Mill periodically, crushing small quantities of ore to prove the recoverable value.

#### LABOUR.

The labour position remains acute, and so far, it has not been possible to obtain any suitable labour from the Alston Labour Exchange. Enquiries were made to the Manager respecting our obtaining Polish labour from a camp at Penrith, and made provisional arrangements to visit Penrith to discuss the matter with the Camp Commandant. Owing to severe weather which blocked the road to Penrith, and which has not yet been cleared, it has been impossible to make the journey. The question of obtaining Polish labour from Penrith, will mean expense in conveying them to and from the mine daily, and if wintery weather conditions continue, daily conveyance may be impossible during the winter months. It is impossible to accommodate Poles in Alston Moor as there is no accommodation available. At the earliest opportunity, I shall pursue the matter further, and will report any progress.

The prospect in Rodderup is most encouraging underground, and if a reasonable supply of labour could be procured it is my opinion, if one of the points "A" and "C\*" continues to improve, the mine would soon meet costs.

GENERAL. Payment by N.F.M.D. of £3009. 4. 4. As agreed, has been made and placed to the V.M. Co.'s credit in Martins Bank, Alston, and the sum due for Royalty, amounting to £677. 16. 10. to Greenwich Hospital and £171.

2. 11. to Lord Allendale, with Income Tax Vouchers received from N.F.M.D., totalling £848. 19. 9. cash, has been paid. The amount retained by the V.M. Co. after paying the £848. 19. 9. as Royalty, out of the £3009. 4. 4., was £2160. 4. 7. Messrs. Blackburn & Main, the V.M. Co.'s solicitors, are now trying to obtain payment for the V.M. Co. of £78. 15. 0. for Expenses as recommended by the Mineral Valuer.

NENTSBURY MINE.

Prospection from the Winze.

A. Teasdale & Partners

79 Days worked.

| Drift (X-Cut). | L  | H   | S.F. | S.M.   | W.  | C.F.       | C.M.          |
|----------------|----|-----|------|--------|-----|------------|---------------|
| E. on "T" Vein | 10 | x 7 | - 70 | - 6.50 | x 5 | - 350      | - 991         |
| N. on "D" Vein | 12 | x 7 | - 84 | - 7.80 | x 5 | - 420      | - 11.89       |
|                |    |     |      |        |     | <u>770</u> | <u>-21.80</u> |

Wages paid: £55. 12. 7.

Cost per Cu.M.: - 51/-.

MONTHLY REPORT - JANUARY 1947.

Page 4.

RODDERUP MINE.

J. W. Robson & Partners

102½ Days worked

|         | L  | W   | S.F.  | S.M.    | H   | C.F.        | C.M.           |
|---------|----|-----|-------|---------|-----|-------------|----------------|
| Flat A. | 14 | x 9 | - 126 | - 11.70 | x 7 | - 882       | - 24.97        |
| " B.    | 17 | x 5 | - 85  | - 7.90  | x 8 | - 680       | - 19.25        |
| " C.    | 8  | x 6 | - 48  | - 4.46  | x 8 | - 384       | - 10.87        |
|         |    |     |       |         |     | <u>1946</u> | <u>- 55.09</u> |

Tonnage to Mill:- Nil.

Wages paid:- £75. 14. 11.

Cost per Cu.M.: - 27s/5d.



## Report on the Nenthead Mines February 1947

### REPORT

\*\*\*\*\*

on the

NENTHEAD MINES

\*\*\*\*\*

FEBRUARY, 1947.

\*\*\*\*\*

|                             | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|-----------------------------|-------------------|------------------|------------------|----------------|
| Ore Mined                   | Nil.              | Occupied<br>by   | 25 Tons          | 25 Tons        |
| Ore Milled                  | "                 | N.F.M.D.         | Nil.             | Nil.           |
| Pb. <del>Opnes.</del> prcd. | "                 |                  | "                | "              |
| % Recovery                  | "                 |                  | "                | "              |
| Hours worked                | "                 |                  | "                | "              |
| Tons per hour               | "                 |                  | "                | "              |
| Tons in stock               | "                 |                  | 25 Tons          | 25 Tons        |

### STOCKS.

|           | <u>Nentsbury.</u>                                    | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------|------------------------------------------------------|------------------|------------------|----------------|
| Crude Ore | Nil.                                                 | Nil.             | 2300 Tons        | 2300 Tons      |
|           | <u>Galena</u> at Nentsbury, Nil.                     |                  |                  |                |
|           | <u>Galena</u> at Rodderup, <del>XXXX</del> 7.90 Tons |                  |                  |                |
|           | <u>Witherite</u>                                     |                  | Nil.             |                |
|           | <u>Fluor Spar</u>                                    |                  | Nil.             |                |

### Compressed Air.

#### Nenthead & Nentsbury.

During most of the month, the Water Supply from Perry Dam was completely exhausted caused by severe frost and exceptionally heavy falls of snow which fell successively and eventually cut off all the supply to Perry Dam. We worked until the Dam was empty, since when we have had no power to produce Compressed Air. The quantity of Compressed Air produced in the earlier part of the month was not easy to estimate as it fell off daily until it stopped altogether.

#### Rodderup Fell.

Although at Rodderup Fell we managed to keep a small supply of water flowing to the Hydro Compressor, the quantity was not sufficient to produce enough Compressed Air for pumping. On Febry. 10th, owing to shortage of coal, the Government prohibited the use of electricity in the North Western part of England, in which Alston Moor is situated, for industrial purposes. We used only sufficient to pump what water was possible, and possibly exceeded the amount we were supposed to use. Although the water rose in point "B", and eventually in "A" and "C", we kept the water from flooding the mine. Electricity was used only for 6 to 7 hours daily, and consequently it is difficult to estimate the Compressed Air produced.

## **NENTHEAD MINES FEBRUARY 1947**

NENTSBURY MINE. Prospecting from the Winze: - In my Report for January, I stated as clearly as possible, the positions of Cox & Dupont Veins in the Quarry Hazel. Neither of these veins, which were only about 6 inches wide, were mineralised. Owing to the freezing of Perry Dam no water was available for producing Compressed Air for drilling, and neither did it seem economical to do any more driving on these veins. The foreman and miners were employed repairing the main level which had collapsed in several places, owing partly to the heavy weight of snow on the surface percolating through. The pump and all materials were drawn up from the Winze and stored in a safe place in the Mine. The quantity of water flowing to the Winze is very little and although eventually the Winze will fill, the water could be pumped out in two or three days, if an inspection of the Winze and the Crosscuts driven was desired. The foreman, Henry Peart, terminated his employment with the V.M. Co. on Feb. 28th.

MILL. A claim for compensation for the damage to the aqueduct was sent to Messrs. Blackburn & Main, the Company's solicitors, on Feb. 17th, after we received the approval of Head Office. The amount claimed is £262 plus the salvaged timber which is usable. Messrs. Blackburn & Main contacted the Insurance Co. and arrangements were made for the Insurance Co.'s Assessor to meet me at Nentsbury, but this has not been possible up to the present, as all the damaged timber etc. has been and is, buried under many feet of snow, and the roads are also blocked. Provisional arrangements have been made to proceed with the coupling of the Rolls to the engine, and work will begin immediately the question of Compensation is settled.

RODDERUP FELL MINE. During the month, the water supply was partly frozen up, and only a small supply was flowing to the Hydro Compressor. The supply was not sufficient for pumping and we had to use Electricity for part of the time. On Feb. 10th, owing to an insufficient supply of Coal being produced, the Government issued a decree that Electricity for the North-West Region of England, in which we are placed, should be cut-off for industrial purposes. Fortunately, a supply had to be left flowing for domestic and essential purposes, for parts of the day only. All roads were blocked and telephone and telegraph services locally were out of commission for five weeks, and neither the Electric Company nor I could speak to the foreman, or see him, and he kept the pump operating by electricity part of the time during the day, thereby keeping the mine free from flooding although the water did rise several feet. This is all that could be done under the circumstances, and I hope that the Government will not blame us for doing what we did. According to the foreman, "B" point, as seen, is now yielding payable ore, and I can only hope that the values which he states as existing, will continue. It has not been possible to inspect point "B" because of water in the working to a depth of 7 to 9 feet. Under appalling conditions, the men, wherever possible at all, were daily employed clearing the watercourses and also temporarily repairing the top of the Hydro Compressor which had been damaged by frozen snow. The

succession of blizzards, which have lasted from 5 to 6 weeks all over England, have been the worst within living memory. These still continue.

MILL. The Mill is completely frozen, and will not be workable until a thaw comes. Coal supplies are very limited, and we have not sufficient in stock to keep the Mill heated, neither do we know when we can get any more. Otherwise the Mill is in fair running condition.

LABOUR. Some of the men, who live some distance from the mine, have been unable to get to work, and only those who live close to Rodderup have attended. The County Council have employed all men possible to clear roads. Alston Foundry was closed completely, and is still closed for lack of power. Their workmen are employed clearing the roads. There has been no road communication with either Newcastle or Penrith for five weeks, and the road to Carlisle has only been open on odd days. Under the circumstances, it has not been possible to get to Penrith to interview the authorities there with regard to Polish labour. Furthermore, all available labour, prisoner and otherwise, has been engaged clearing roads and railways. At present a great part of the Country is completely blocked with snow, which has even buried trains and houses.

GENERAL. As reported to Head Office, a notice was received by Mr. B. T. Hallett during the month, releasing certain parts of the V.M. Property requisitioned on behalf of N.F.M.D. Ltd. Mr. Hallett sent the notice and forms on to me, and I in turn forwarded them to the Company's solicitors, with instructions to act in the matter with a view to absolving the V.M. Co. from any responsibility for any future claims or demands which might arise from the activities of N.F.M.D. Messrs. Blackburn & Main are dealing with the matter. The properties released were the sites of the Tailing Dumps treated by N.F.M.D. together with a length of piping which they used for the disposal of the waste material from the treatment. The Rampgill Mill premises are still requisitioned and there is no indication when they will be vacated.

## Report on the Nenthead Mines March 1947

### R E P O R T

\*\*\*\*\*

on the

### N E N T H E A D   M I N E S

\*\*\*\*\*

M A R C H   1 9 4 7.

\*\*\*\*\*

---

|                  | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|------------------|-------------------|------------------|------------------|----------------|
| Ore Mined        | Nil.              | Occupied         | Nil.             | Nil.           |
| Ore Milled       | "                 | by               | "                | "              |
|                  |                   | N.F.M.D.         |                  |                |
| Pb.Concs. prdcd. | "                 |                  | "                | "              |
| % Recovery       | "                 |                  | "                | "              |
| Hours worked     | "                 |                  | "                | "              |
| Tons per hour    | "                 |                  | "                | "              |
| Tons in stock    | "                 |                  | 25 tons          | 25 tons        |

---

### STOCKS.

|                               | <u>Nentsbury.</u> | <u>Rodderup.</u>            | <u>Wellhope.</u> | <u>Totals.</u> |
|-------------------------------|-------------------|-----------------------------|------------------|----------------|
| Crude Ore                     | Nil.              | 25 tons                     | 2500 tons        | 2525 Tons      |
| <u>Galena</u> , at Nentsbury, |                   | Nil.                        |                  |                |
| <u>Galena</u> , at Rodderup,  |                   | <del>xxix</del> . 7.90 Tons |                  |                |
| <u>Witherite</u> ,            |                   | Nil.                        |                  |                |
| <u>Fluor Spar</u> ,           |                   | Nil.                        |                  |                |

---

### Compressed Air

Nenthead & Nentsbury.      Not until the last week in March, was there any water in Perry Dam, and when a supply was available in the last week, it was not possible to use the Pelton Wheel because the jets kept choking through small lumps of ice continually flowing down the pipe-line. At the time of writing (April 8th) the main pipe-line is carrying a full supply of water. The damage to the pipe-line, caused by the frost, is not serious. The air pipe-line from Nenthead to Nentsbury Mine, will be tested early in April. There was no supply of Compressed Air during March.

Rodderup.      During the early part of March there was only a small quantity of water available for the Hydro Compressor. Towards the end of the month, the supply improved and from March 21st it was sufficient to keep the Hydro Compressor working 24 hours daily. Electricity, although restricted by Government order, enabled us to work part time, and with the Hydro Compressor, the water was pumped out points A, B, and C, and work, concentrated on point B, was continued. It is very difficult to estimate the quantity of Compressed Air for the month, but from March 21st to March 31st, the quantity produced by water power and electricity was about 550 cubic feet per minute at a pressure of 80 to 85 lbs per square inch at point B.

## **NENTHEAD MINES**

### **MARCH 1947**

**NENTSBURY MINE.** During the month, the two miners (one acting as foreman) were employed repairing the main level, where falls occurred caused by excess water percolating through the roof of the level from melting snow. The level in places was supported by timber, which we are replacing with concrete blocks which we have in stock. It will take the two men until about April 16th to repair the level, after which, if we have no further falls of snow and hard frost, we expect to get Compressed Air into the mine and commence drilling.

**MILL.** On April 4th (Good Friday) I had an interview at Nentsbury with the Assessor of the Insurance Co. with regard to our claim for damages in respect of the accident which destroyed the aqueduct. Full particulars of the interview were sent in a letter to Head Office yesterday. Briefly, he considers that the V.M. Co. should not bear any cost of the replacement of the aqueduct. We are now awaiting his report, after which we shall take up the matter with the Insurance Co. and the County Council, with the help of Messrs. Blackburn & Main in regard to the legal position.

**RODDERUP FELL.** Mine. I can add little to my report by letter dated March 27th, to Head Office and Mons. Chaplain. Point B where all work has been done since I wrote on March 27th, continues to reveal payable ore both in the roof and in the sides. This point is the most encouraging part of the mine, and is the best we have discovered since operations commenced in the area on the south side of Rodderup Vein. We shall continue widening this Flat as far as the good ore exists, with safety, and shall also increase the height with due regard to safety.

We were severely handicapped during March, through the water supply being cut-off most of the month by heavy falls of snow and hard frost, and to some extent, by intermittent cuts of electricity by a Government order which affected the North West Region of England. The cause of the electricity cuts, which still exist in part, is the shortage of coal. In the Weekly Report, April 1st-5th, it will be noted that the Flat at point B is 12 feet in height and 12 feet wide, and is mineralised throughout. The ore is payable.

**MILL.** The Mill was completely frozen most of the month, and only a limited quantity of water was available towards the end of the month, when the machinery was put into operation, but owing to a 40 feet length of wooden water trough being broken down under 20 feet of snow, the supply of water soon failed. As soon as it is possible, the broken water trough will be replaced by a double length of 12 inch diameter pipes, supplied from Nenthead. Since the end of March, we have discovered some damage has been caused to another length of wooden water-trough near Greencastle reservoir, but so far as we know, the damage is not serious. With a small labour force, all these repairs hinder the work of mining and milling.

**LABOUR.** Owing to the stormy weather and the blocking of all roads, one of our men obtained working casting snow near his home, which is some distance from the mine, and he has now obtained permanent employment with the

County Council on road repairs. We are still trying to get more labour, but it was not until the end of last week that the road to Penrith was opened again, and a further snow storm today has closed it again. In all probability, if there are no further falls of snow, the road will be soon open, and I shall then try to get to Penrith to see whether any Polish, or prisoner-of-war, labour is available.

GENERAL. The quarterly rent of £50, in respect of Rampgill Mill, to March 25th, has been paid through Messrs. Blackburn & Main, and credited to the V.M. account at the Alston branch of Martins Bank Ltd.

Particulars in regard to all matters respecting the derequisitioning of the dump sites, payment of £78. 15. 0. For expenses, also paid by N.F.M.D. to Messrs. Blackburn & Main and accepted and retained by them until N.F.M.D. agree that the sum is not in full settlement of expenses in connection with the dumps, having all been sent to Head Office. The position to date is as reported in the letters sent.

| <u>R o d d e r u p      M i n e</u>                 |    |     |       |                           |       |                |                |
|-----------------------------------------------------|----|-----|-------|---------------------------|-------|----------------|----------------|
| <u>Prospection in Flats South of Rodderup Vein.</u> |    |     |       |                           |       |                |                |
| <u>J. W. Robson &amp; Partners.</u>                 |    |     |       |                           |       | 30 Days worked |                |
| <u>Flat.</u>                                        | L. | W.  | S.F.  | S.M.                      | H.    | <u>C.F.</u>    | <u>C.M.</u>    |
| A.                                                  | 10 | x 9 | - 90  | --                        | 8.36  | x 6            | - 540 - 15.29  |
| B.                                                  | 3  | x 6 | - 18  | -                         | 1.67  | x 9            | - 162 - 4.58   |
| B. (bottom)                                         | 36 | x 5 | - 180 | -                         | 16.72 | x 3            | - 540 - 15.29  |
| C.                                                  | 2  | x 6 | - 12  | -                         | 1.11  | x 8            | - 96 - 2.72    |
|                                                     |    |     |       |                           |       | <u>1338</u>    | - <u>37.88</u> |
| Tonnage to Mill:- Nil.                              |    |     |       |                           |       |                |                |
| Wages paid:- £24: 11s:-d.                           |    |     |       | Cost per Cu.M.:- 12s/11d. |       |                |                |

## Report on the Nenthead Mines April 1947

REPORT  
on the  
NENTHEAD MINES  
APRIL 1947

---

|                   | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|-------------------|-------------------|------------------|------------------|----------------|
| Ore mined         | Nil.              | Occupied         | 113 tons         | 113 tons       |
| Ore Milled        | "                 | by<br>N.F.M.D.   | 111 "            | 111 "          |
| Pb. Concs. prdcd. | "                 |                  | 8.40 "           | 8.40 "         |
| % recovery        | "                 |                  | 7.57%            | 7.57%          |
| Hours worked      | "                 |                  | 23.5 hrs.        | 23.5 hrs.      |
| Tons per hour     | "                 |                  | 4.72 Tons        | 4.72 Tons      |
| Tons in Stock     | "                 |                  | 27 "             | 27 "           |

---

### STOCKS.

|           | <u>Nentsbury.</u>            | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------|------------------------------|------------------|------------------|----------------|
| Crude Ore | Nil.                         | 27 tons          | 2500 tons        | 2527 tons.     |
|           | <u>Galena, at Nentsbury,</u> | Nil.             |                  |                |
|           | <u>Galena, at Rodderup,</u>  | 16.30 Tons       |                  |                |
|           | <u>Witherite</u>             | Nil.             |                  |                |
|           | <u>Fluor Spar</u>            | Nil.             |                  |                |

---

### Compressed Air.

Nenthead & Nentsbury. During the first week in April it was not possible to use the Pelton Wheel at Middlecleugh, because floating ice blocked the jets. On April 8th, the trouble ceased, and the main pipe-line again carried a fully supply of water. There were however three small burst in the line, caused by the severe frost and the heavy weight of snow. These were repaired. The air pipe-line from Nenthead to Wellhope was tested and three leakages repaired. By middle April, the air pressure in the mine was 85 lbs per sq. inch, with pump and rock-drill working. If need be, we could produce about 400 cu. ft. per minute at 85 lbs pressure in the mine.

Rodderup. During April, the Hydro Compressor, except for short intervals when the grate over the mouth of the line was choked by grass and turf loosened by the breaking up of the ice formations in the dam and watercourses, ran well and produced sufficient Compressed Air at 85 lbs pressure to do most of the pumping. The quantity of Compressed Air produced by water power and electricity was about 550 cu.ft. per minute at a pressure of about ~~550~~ 85 lbs. per square inch at point "B".

---

## **NENTHEAD MINES**

### **APRIL 1947**

NENTSBURY MINE. During April, the two miners repaired the main level, replacing timber with concrete blocks. On the 15th April, I inspected the Mine and found that in two places, Lead ore in payable quantity and free of Witherite could be broken, if and when labour could be procured. In the meantime, having neither sufficient manual labour nor a horse available for breaking and hauling the ore, I arranged with the two miners to push out the wagons filled with good ore and get them ready to transport to Rodderup for milling there. This ore will be transported to Rodderup early in May.

MILL. No settlement has yet been reached with the Insurance Co. and the County Council re: the restoration of the aqueduct at Nentsbury. Messrs. Blackburn & Main have been writing and telephoning constantly in regard to the matter, and I have had two meetings with Mr. MacPhail and several telephone conversations. Mr. MacPhail is now trying to arrange a meeting between all parties concerned, in Carlisle as soon as possible, which I shall attend.

RODDERUP FELL MINE. During April, 113 tons of ore was drawn from the mine and sent to the Mill. Of this 111 tons were milled. The recovery was 8.40 tons of Lead Concentrates, the percentage recovery being 7.57%. All this ore came from point B, which, at the end of the month, was yielding ore quite up to the average recovered. All work was concentrated in point B. The whole of the recovery was made during the last three weeks of the month. I will deal with the labour position, under "Labour", later in this report.

MILL. It took some time to get the Mill into running order after the complete "freeze-up" for over two months. The part which suffered most, was the Slime plant where some pipes were broken and also parts of two classifiers, and the surface of the main slime table was damaged.

An order for a new covering and riffles was placed for the table early in February, but owing to the restrictions in the use of power and fuel throughout England during February and March and only partial supplies since, the manufacturers have been unable to supply us promptly. We have an advice note stating the items were despatched on April 15th, but they have not been delivered yet. Consequently, most of our Slime Lead has had to be stored in the pits, for re-treatment later, and is not included in the production. The jigging section of the Mill is in fair condition.

SALE OF LEAD ORE. A permit to purchase approx. 6.175 tons of Lead Concentrates was obtained by the British Pyros White Lead Co. Ltd. in the last week in April. We arranged with the Alston Stationmaster to get a truck and despatch this early in May. (We despatched 6.548 tons after deducting 1.9% moisture estimated on previous despatches, on May 2nd.) The value of this ore, we have estimated to be £500. 18. 5. equal to £76.35 Per ton F.O.R. Alston Station.

LABOUR. The labour situation is as difficult as ever.



For months, we have made application to the Alston Labour Exchange without any satisfactory result. Application had also been made for Poles, from a camp at Penrith, but all our efforts were fruitless. After again contacting the Manager of the Labour Exchange at Alston, and getting him to visit Nenthead, when he stated that he only had a small number of men on his books and all these were partially incapacitated and unable to work in mines.

I urged him to contact his Head District Office in Carlisle, which he did. Carlisle then telephoned me, and I put the whole matter before the official there, telling him plainly that we had been applying for labour for months. I also asked him about the Poles at Penrith, and told him that we had written Penrith eight days before and received no reply. The Carlisle official then contacted Penrith and Penrith phoned me. After some delay, and more plain speaking, it was arranged that an interview should take place at Penrith the following day. A report of the interview has been sent to Head Office and to Mons. Chaplain. No reply to our appeal was received by the end of the month. I do not know what more to do, to get labour.

Coal mining has now first priority. The coal miners 5 day-week comes into force on May 5th, and probably after that there will be more trouble. We secured one man for Rodderup, and then at the end of the month we lost one, for no other reason than that he could get a house at a Colliery and a slightly higher pay. It is most irritating to know that the Tax-payers in this Country have to pay high taxes to keep 150,000 Poles in food and clothing and they cannot be employed when employment is available. The local labour force in Alston is not big, and with the Government housing scheme, the war-developed Foundry, and small coal mines, workable now at the present very high price of coal, and a Barytes Mine working, the labour supply is no longer available for Lead mining.

GENERAL. The £78. 15. 0. paid to Messrs. Blackburn & Main conditionally, and refused by us with the conditions attached, has now been paid to the V.M. Co.'s account at Martins Bank, Alston, after the Ministry of Supply had agreed that the expenses referred only to the compensation claim for the dumps, and not to any subsequent claim which might be made for legal expenses in connection with the de-requisitioning of the dump sites.

#### Probable Sale of Fluor Spar from Dumps.

At Rodderup Fell, near the Middle Level admit, we have a heap of low-grade tailings, which contain only a very small percentage of Lead, and a higher, but compared to Fluor Spar usually marketed, a comparatively low percentage of Calcium Fluoride. In 1941, small parcels of the heap was washed in Nentsbury Floor, and the Fluor Spar sold.

The result did not meet the cost of transport and washing, which were much lower then than now. The heap was measured and sampled by Dr. K. C. Dunham, of the Geological Survey, in 1941 and estimated by him to contain 60,000 tons. An offer was made by a Merchant, a Mr. John Bostock, of Westgate, Co. Durham, towards the end of April to purchase the heap, at 10s/- per ton on site. As the removal of the whole or part of the heap would entail the maintenance of the road, which, under the terms of the lease, the V.M. Co. are bound to maintain. I asked the Merchant to call at Nenthead for an interview, and after discussion we agreed to the following terms.

He would purchase 10,000 Tons at a time, at a price of 11s/6d per ton on site, and would pay in advance for each 500 Tons before removing it at the rate of 250 tons weekly or more. The Merchant undertook to maintain the road at his expense, but the V.M. Co. would provide material for this from old waste heaps. On the removal of the first 10,000 tons, the Merchant would have the option to purchase a further 10,000 tons on the same conditions. A legal Agreement, incorporating these terms will be prepared by our Solicitors Messrs. Blackburn & Main, both parties being agreed that the interests of both parties would be best protected this way. If the Merchant fulfils his part of the agreement, it should be possible for the Company to realise between £4,000 and £5,000 this year, for material which has been lying in a heap for very many years, and at the expiry of selling even 20,000 tons, the Company will have at Rodderup, and Nenthead, where there is another heap of similar grade material estimated at 20,000 tons, about 60,000 tons left. The Rodderup Heap was tested in the Rodderup Mill during the 1914-18 War, but without much success. A price of 11s/6d per ton, leaves the V.M. Co. with 10s/6d per ton nett. A Royalty of 1s/- per ton is due to the Greenwich Hospital Estates. Messrs. Blackburn & Main will prepare the Agreement and no material will be removed until the Merchant has paid the V.M. Co. for 500 Tons in advance, to be followed by forward payments regularly.

The V.M. Co. is not involved in removing the material, either by road or rail. I am unable to offer any information concerning what the material is to be used for, and neither do I know anything about the financial standing of the Merchant, which is why I have asked for payment in advance.

R o d d e r u p      M i n e

Prospection in Flats South of Rodderup Vein.

J. W. Robson & Partners.

101 Days Worked.

Flat.

|      |          | L | W    | S.F. | S.M.   | H    | C.F.          | C.M.           |
|------|----------|---|------|------|--------|------|---------------|----------------|
| Flat | B. South | 9 | x 11 | - 99 | - 9.20 | x 12 | - 1188        | - 33.64        |
| "    | B. East  | 6 | x 12 | - 72 | - 6.69 | x 10 | - <u>720</u>  | - <u>20.38</u> |
|      |          |   |      |      |        |      | <u>1908.-</u> | <u>54.02</u>   |

Tonnage to Mill:- 113 Tons.

Wages paid:- £83. 0. 2.

Cost per Cu.M.:- 30/9.

## Report on the Nenthead Mines May 1946

R E P O R T  
 ON THE  
 N E N T H E A D M I N E S  
 M A Y 1 9 4 7.

|                    | <u>Nentsbury.</u>                 | <u>Rampgill.</u>           | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------|-----------------------------------|----------------------------|------------------|----------------|
| Ore Mined          | 10 Tons<br>(taken to<br>Rodderup) | Occupied<br>by<br>N.F.M.D. | 134 tons         | 144 tons.      |
| Ore Milled         |                                   |                            | 134 "            | 134 "          |
| Lead Concs. prdcd. | -                                 |                            | 8.50 "           | 8.50 "         |
| % Recovery         | -                                 |                            | 6.34%            | 6.34%          |
| Hours worked       | -                                 |                            | 31 hrs.          | 31 hrs.        |
| Tons per hour      | -                                 |                            | 4.32 tons        | 4.32 tons      |
| Tons in stock      | -                                 |                            | 37 tons          | 37 tons        |

### STOCKS.

|                              | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------------------------|-------------------|------------------|------------------|----------------|
| Crude Ore                    | Nil.              | 37 tons          | 2500 tons        | 2537 tons      |
| <u>Galena</u> , at Nentsbury |                   |                  | Nil.             |                |
| <u>Galena</u> , at Rodderup  |                   |                  | 18.252 Tons      |                |
| <u>Witherite</u>             |                   |                  | Nil              |                |
| <u>Fluor Spar</u>            |                   |                  | Nil.             |                |

### Compressed Air.

Nenthead & Nentsbury      Compressed Air, produced at Nenthead when required, about 300 cu. ft. per minute at a pressure of 90 lbs. per square inch at Nenthead, and a pressure of 80 lbs per square inch in Nentsbury Mine.

Rodderup.      The quantity of Compressed Air produced at Rodderup by water-power and electricity, was about 550 cu.ft. per minute at a pressure of 85 lbs per square inch. Compressed Air produced from Water Power was used for pumping, and that produced by Electricity, for drilling. The pressure was 85 lbs per square inch at Point B.

## **NENTHEAD MINES MAY 1947**

NENTSBURY MINE. Only two miners were employed during May in Nentsbury Mine. These men were employed maintaining the mine and when possible breaking ore which is stored in the rises in the mine. It has not yet been possible to find a contractor with a horse, who will draw the small quantity of ore broken. The ore can be drawn whenever a Contractor is available.

MILL. Owing to the illness of Mr. MacPhail, in early May, and of myself from the 14th May, the negotiations regarding the restoration of the aqueduct at Nentsbury, were delayed. The suggested amount of compensation offered by the Insurance Company, we did not consider nearly sufficient, and we eventually decided that we should obtain a quotation from a Contractor for conveying the water to the Mill by Cast Iron pipes, of not less than 15 inch diameter, taken under the road. The Cumberland County Council have already offered to meet the cost of underground pipes between the margins of the road, including the cost of laying them, and we shall press for the Insurance Co. to meet the cost of supplying and laying the pipes from the source of supply to one margin of the road and from the other margin to the point of service inside the Mill. We are awaiting the Contractor's sketch plan and estimate.

RODDERUP MINE. During May, 134 tons of ore were mined, and 124 tons crushed, plus 10 tons from Nentsbury Mine. The approximate value of the Rodderup ore, was just over 6% recovered. To open up a second Flat in Point B, we had to cut ground which was not as good as in the first Flat. It is probable that the recovery will improve in June.

MILL. The Mill is now in fair condition. The difficulty is the long delay in obtaining spare parts from the manufacturers. Fortunately, we have a supply of most requirements, in stock, but often it takes from 5 to 6 months to get a small part.

LABOUR. At the end of May, we were informed that at long last, we were to get 12 German Prisoners of War to work in Rodderup Mine. These men are accommodated at a Camp in Alston, and are transported daily to and from the camp to the mine. After these men have settled down, I shall report on their efficiency.

SALE OF LEAD ORE. During May, 6.548 tons of Lead Concentrates were sold to British Pyros White Lead Co. Ltd., West Drayton. This ore, 1/5 mm. in size, was over 80% Pb, and brought £76.50 Per ton nett. This parcel has been paid for. A parcel of Slime Lead Ore, weighing 7.281 tons dry and of low quality, assaying 68.5% Pb, was despatched to Messrs. Walkers, Parker & Co., Ltd., Newcastle-on-Tyne. The dry weight, and the analysis, were not known at the end of the month, and we have not received payment for this parcel yet. Another 8-ton truck of Lead Ore will be sent to British Pyros Co., at the same price, early in June, as soon as a suitable railway-truck can be procured.

PROBABLE SALE OF FLUOR SPAR DUMPS. Negotiations respecting the Agreement for the sale of Fluor Spar from the Dumps, are proceeding between the solicitors for Mr. Bostock and the V.M. Solicitors. The average minimum quantity to be removed weekly, has been agreed at 200 Tons, instead of 250 Tons per week as first suggested by Mr. Bostock, who, however, hopes to remove more than 200 tons weekly. His difficulties are the shortage of railway trucks and transport problems generally. It has been decided that he shall commence to remove the Fluor Spar, immediately the Agreement is signed by both parties. The price remains at 11s/6d per ton on site.

re: N.F.M.D. On behalf of the V.M. Co., Messrs. Blackburn & Main are submitting a claim for the restoration of the dumps, to a safe and acceptable condition, after being left by N.F.M.D. in a dangerous condition. The claim which includes an amount in respect of damages to a road, which will have to be repaired, and to a pipe-line, and any cost which the V.M. Co. may be called upon to undertake in connection with the restoration of a footpath, amounts to £424 plus whatever the amount of the restoration of the footpath if necessary. This claim is independent of a further claim to be made in respect of damages to Rampgill Mill and surrounding property, after it has been de-requisitioned. I cannot express an opinion regarding the probability of payment of our claims. N.F.M.D. now actually part of the Ministry of Supply, are difficult to deal with, and consequently we have to fight for every £1. we can get.

GENERAL. I very much regret the delay in sending this report. The cause has been my illness during May, when the Doctor would not allow me to undertake any work for three weeks. After the three weeks expired, I had to attend to much accumulated work, including negotiations with regard to obtaining the German P.O.W., and interviews and correspondence with Messrs. Blackburn & Main regarding the compensation claim for the damaged aqueduct, preparing the estimate for the N.F.M.D. claim in connection with the Nenthead Dumps, and considering developments in regard to the proposed Agreement between Mr. Bostock and the Company for the sale of the Fluor Spar dumps.

R o d d e r u p      M i n e

oooooooooooooooooooo

Prospection South of Rodderup Vein.

J. W. Robson & Partners.

101 Days worked.

Flat.

|           | L      | W | S.F. | S.M. | H          | C.F. | C.M.                       |
|-----------|--------|---|------|------|------------|------|----------------------------|
| B.1 South | 9 x 13 | - | 117  | -    | 10.87 x 12 | -    | 1404 - 39.75               |
| B.2 East  | 9 x 11 | - | 99   | -    | 9.20 x 12  | -    | <u>1188</u> - <u>33.64</u> |
|           |        |   |      |      |            |      | 2592 - <u>73.39</u>        |

Tonnage to Mill:- 134 Tons

Wages paid:- £84. 11. 11.

Cost per Cu.M.:- 23s/1d.

## Report on Nenthead Mines June 1947

| <div style="text-align: center;"> REPORT<br/> on the<br/> NENTHEAD MINES<br/> JUNE 1947 </div> |                   |                            |                  |                         |
|------------------------------------------------------------------------------------------------|-------------------|----------------------------|------------------|-------------------------|
|                                                                                                | <u>Nentsbury.</u> | <u>Rampgill.</u>           | <u>Rodderup.</u> | <u>Totals.</u>          |
| Ore Mined                                                                                      | 25 Tons           | Occupied<br>by<br>N.F.M.D. | 108 Tons         | <del>XXX</del> 133 Tons |
| Ore Milled                                                                                     | Nil.              |                            | 125 "            | 125 "                   |
| Lead Concs. prdcd.                                                                             | "                 |                            | 8.80 "           | 8.80 "                  |
| % Recovery                                                                                     | "                 |                            | 7.04%            | 7.04%                   |
| Hours worked                                                                                   | "                 |                            | 29 hrs.          | 29 hrs.                 |
| Tons per hour                                                                                  | "                 |                            | 4.31 Tons        | 4.31 Tons               |
| Tons in stock                                                                                  | 25 tons           |                            | 20 "             | 45 "                    |

| <u>STOCKS.</u> |                               |                  |                             |                |
|----------------|-------------------------------|------------------|-----------------------------|----------------|
|                | <u>Nentsbury.</u>             | <u>Rodderup.</u> | <u>Wellhope.</u>            | <u>Totals.</u> |
| Crude Ore      | 25 Tons                       | 20 Tons          | 2500 Tons                   | 2545 Tons      |
|                | <u>Galena</u> , at Nentsbury, |                  | Nil.                        |                |
|                | <u>Galena</u> , at Rodderup,  |                  | <del>XXXX</del> 11.751 Tons |                |
|                | <u>Witherite</u> ,            |                  | Nil.                        |                |
|                | <u>Fluor Spar</u> ,           |                  | Nil.                        |                |

| <u>Compressed Air.</u>                                                                                                                                                                                                                                                     |                                                                                                                                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <u>Nenthead &amp; Nentsbury.</u><br><br>square inch at Nenthead, and a pressure of 80 lbs. per square inch in Nentsbury Mine.                                                                                                                                              | Compressed Air produced at Nenthead, when required, about 300 cu.ft. per minute, at a pressure of 90 lbs per square inch.                 |
| <u>Rodderup.</u><br><br>550 cu.ft. per minute at a pressure of 85 lbs per square inch. All produced by Water Power, and part of what was produced by Electricity, was used for pumping. The general pressure underground, throughout the mine, was 85 lbs per square inch. | Compressed Air produced at Rodderup, by Water Power and Electricity, about 550 cu.ft. per minute at a pressure of 85 lbs per square inch. |

## **NENTHEAD MINES**

### **JUNE 1947**

NENTSBURY MINE. During the early, part of the month two miners were employed in the mine. In the latter part, three men were employed. The employees maintain the main level and make the daily inspection and report, as required by Government regulation. After the inspection, they drill whenever possible and pick the ore, which is stored in one of the Rises.

MILL. Both Messrs. Blackburn & Main and I have pressed the Contractors, Messrs. Michael Thompson Ltd., Carlisle, to send us their estimate for restoring the water supply at Nentsbury Mill, with 18" dia., pipes instead of the originally suggested 15" dia., pipes. We have received today (July 3rd) an estimate as per copy enclosed. The Contractor was the Assessor employed by the Road Haulage Insurance Co. to assess the damages incurred by the accident. His offer to the V.M. Co. was £150, which we refused. His quotation for conducting the water underground, as recommended by the County Council, is £485. Our Claim was for £282. Unless the Insurance Company are prepared to pay the sum of £485, and I do not believe that they will, I shall consult Messrs. Blackburn & Main and press for our claim in full, in which case we would restore the aqueduct. I am sure we can do it for £282. If Messrs. Blackburn & Main consider that the Insurance Co. will pay £485 and Messrs. Thompson Ltd will carry out the work immediately, I suggest that they be engaged. The specification is satisfactory, but the cost is prohibitive.

RODDERUP MINE. The result for June represents three weeks work. From June 23rd to 28th (inclusive) the employees entitled to a week's holiday, were on holiday, and such other employees as were entitled to part of a week's holiday, were also on holiday. The ore mined was 108 tons, and the quantity crushed, 125 tons. Concentrates recovered, amounted to 8.80 tons, the percentage recovery being 7.04%. If we had worked a full month the output would probably have been 11 tons. Point B is the best point in the mine, and as the ore is extending East and West, and is in the bottom of the Tynebottom Limestone, we are opening up two flats at this point. We have also drilled in points A and C, where the mining is confined to the top of the Tynebottom Limestone, neither of these points is as rich as Point B. Our main difficulty at present, is the quality of Steel Rip Bits used for drilling. The quality of the Steel from which the Bits are made, has deteriorated, and the Bits will not stand up to the hard rock in Rodderup. I am arranging for a drilling test to be made early in July, using a special Tungsten-Carbide tipped type of Bit manufactured by Messrs. Holman Bros. Ltd. These Bits are guaranteed to drill 80 feet in hard rock, with one Bit, and up to 300 feet in medium rock. The Bits we have been using, have only been drilling a few inches with one bit. Steel is in very short supply in England and very inferior in quality. We must, by some means, considerably increase the quantity of ore broken.

MILL. The Mill is in fair condition, and we could crush much more ore if we had it.

LABOUR. We obtained 12 German Prisoners of War, early in June. After a week, one was recalled because of illness. These men have had no previous mining experience, and neither, apparently, had they done any hard manual labour. We have no complaints to make. They are willing to work, and so far, have given no trouble, but they are not equal to our trained men. It is impossible to get local labour.

SALES OF LEAD ORE. During the month, we sold 8.020 Tons of Lead Concentrates, to the British Pyros White Lead Co. Ltd., West Drayton at £76.50 per ton, at Alston Station. This parcel has not yet seen paid for, but the previous parcel has been paid for and, also, Messrs. Walkers Parker & Co., Ltd., Newcastle, have paid for the parcel of Slime Lead sold to them in May. We have another parcel ready to send the Pyros Co. as soon as they obtain a further Purchasing Licence from the Government.

PROBABLE SALE OF FLUOR SPAR DUMPS. Nothing has yet been settled re: the sale of the Fluor Spar dumps. Solicitors for both parties have been corresponding re: the Agreement. I have to confess, that I am now doubtful whether Bostock, who made us an offer in writing and agreed to our conditions, is able to fulfil those conditions. Negotiations are still going on.

GENERAL. The claim for damages in respect of the restoration of the dump sites left by N.F.M.D., has been submitted by Messrs. Blackburn and Main, but to date no reply has been received. We are doing all we possibly can to produce more ore, and every effort is being made to obtain the most modern appliances. Supplies of every description, are short, throughout the country, and spare parts which could be obtained within a few days, cannot be delivered in less than a few months now, as we have found in the case of Vee-rope Belts, which were ordered for the smaller 5 cylinder Compressor at Rodderup in March and which are promised for delivery in August at the earliest. Manufacturers, have scarcely anything in stock, and the country is short of both Coal and Steel. With frequent strikes in all parts of the country, everything is being held up.

# Rodderup Mine

## Prospection South of Rodderup Vein.

J. W. Robson & Partners.

74 days worked.

| <u>Flat.</u> | <u>L</u> | <u>W</u> | <u>S.F.</u> | <u>S.M.</u> | <u>H.</u> | <u>C.F.</u> | <u>C.M.</u>    |
|--------------|----------|----------|-------------|-------------|-----------|-------------|----------------|
| A.           | 5        | x 10     | - 50        | - 4.04      | x 5       | - 250       | - 7.08         |
| B.1          | 8        | x 13     | - 104       | - 9.66      | x 10      | - 1040      | - 29.45        |
| B.2          | 7        | x 12     | - 84        | - 7.80      | x 12      | - 1008      | - 28.54        |
| B.3          | 6        | x 9      | - 54        | - 5.02      | x 13      | - 702       | - 19.87        |
|              |          |          |             |             |           | <u>3000</u> | - <u>84.94</u> |

Tonnage to Mill:- 108

Wages paid: £61: 3: 9.

Cost per Cu.M.:- 14s/5d.



## Report on the Nenthead Mines July 1947

|                                                  |                                                                                                                                                                                                                                                                                                                                      |                  |                            |                |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------------|----------------|
| REPORT<br>on the<br>NENTHEAD MINES<br>JULY 1947. |                                                                                                                                                                                                                                                                                                                                      |                  |                            |                |
|                                                  | <u>Nentsbury.</u>                                                                                                                                                                                                                                                                                                                    | <u>Rampgill.</u> | <u>Rodderup.</u>           | <u>Totals.</u> |
| Ore mined                                        | 15 Tons                                                                                                                                                                                                                                                                                                                              | Occupied<br>by   | 150 Tons                   | 165 Tons       |
| Ore Milled                                       | Nil.                                                                                                                                                                                                                                                                                                                                 | N.F.M.D.         | 130 "                      | 130 "          |
| Lead Concs. prdcd.                               | "                                                                                                                                                                                                                                                                                                                                    |                  | 6.8 "                      | 6.80 "         |
| % Recovery                                       | "                                                                                                                                                                                                                                                                                                                                    |                  | 5.23%                      | 5.23%          |
| Hours worked                                     | "                                                                                                                                                                                                                                                                                                                                    |                  | 34<br><del>34.82</del> hrs | 34 hrs.        |
| Tons per hour                                    | "                                                                                                                                                                                                                                                                                                                                    |                  | 3.82 Tons                  | 3.82 Tons      |
| Tons in stock                                    | 40 Tons                                                                                                                                                                                                                                                                                                                              |                  | 40 "                       | 40 "           |
| <u>STOCKS.</u>                                   |                                                                                                                                                                                                                                                                                                                                      |                  |                            |                |
|                                                  | <u>Nentsbury.</u>                                                                                                                                                                                                                                                                                                                    | <u>Rodderup.</u> | <u>Wellhope</u>            | <u>Total.</u>  |
| Crude Ore                                        | 40 tons                                                                                                                                                                                                                                                                                                                              | 40 tons          | 2500 tons                  | 2580 tons      |
|                                                  | <u>Galena, at Nentsbury,</u>                                                                                                                                                                                                                                                                                                         |                  | Nil.                       |                |
|                                                  | <u>Galena, at Rodderup,</u>                                                                                                                                                                                                                                                                                                          |                  | 18.551 Tons                |                |
|                                                  | <u>Witherite</u>                                                                                                                                                                                                                                                                                                                     |                  | Nil.                       |                |
|                                                  | <u>Fluor Spar</u>                                                                                                                                                                                                                                                                                                                    |                  | Nil.                       |                |
| <u>COMPRESSED AIR</u>                            |                                                                                                                                                                                                                                                                                                                                      |                  |                            |                |
| <u>Nenthead &amp; Nentsbury.</u>                 | Compressed Air produced at Nenthead from Water power, when required, about 300 cubic feet per minute at a pressure of 90 lbs per square inch at Nenthead, and about 80 lbs pressure in Nentsbury Mine.                                                                                                                               |                  |                            |                |
| <u>Rodderup.</u>                                 | Compressed Air produced at Rodderup from Water power and electricity, about 550 cubic feet per minute at a pressure of 85 lbs per square inch. All compressed air produced by water power, plus a small part produced by electricity, is used for pumping. The general pressure is about 85 lbs per square inch throughout the mine. |                  |                            |                |

NENTHEAD MINES  
JULY 1947

NENTSBURY MINE. During the month, when clearing an old level driven, about 20 years ago, with the object of discovering whether any ore had been left there then as unpayable but which might be payable at the present price of Lead, we found Lead Ore 12 inches in width. Exactly what this deposit is, we cannot state definitely until more work has been done at a lower level. At tracing attached indicates where this ore has been, found. If my Monthly Report covering this period, had not, been burnt in the fire which destroyed one of our offices in 1937 I could have stated definitely what was done at the time. It appears that the old level referred to, was driven from the side of Liverick Vein, on the North side, of High Raise Vein. It may therefore be a split vein from Liverick Vein.

I am unable to give more information now. Liverick Vein in this area was a profitable Vein even when the price of Lead was low.

MILL. Although I have consulted Messrs. Blackburn & Main, who have pursued the matter with the County Council and the Insurance Company, I have not heard anything definite in regard to restoring the water supply to Nentsbury Mill for some weeks. When I last consulted our Solicitors, they informed me that the Assistant County Surveyor desired another interview with me on the site, and I instructed them to inform him that could be available at any time by giving me one day's notice. The whole matter is very unsatisfactory.

RODDERUP MINE. During July, 150 tons of ore were mined, mostly from Point B, with a small proportion from Point A. The Mill recovery was 6.80 tons compared with 8.80 tons in June from 108 tons crushed. The percentage recovery dropped from 7.04 to 5.23%. We have tried every means to increase the tonnage, and have picked out what rock we could. The result of the month's work is discouraging, but we have no alternative but to persevere and carry on. During the month, we carried out tests with Tungsten-Carbide tipped Bits, and had a demonstrator from Holman Bros. Ltd. to drill in our presence. There is no doubt but what these Bits will drill the footage claimed for them, but whether they are economical I cannot state until more has been done with them. At £4. 14. 6. each, they are very expensive, but, of course, when blunted, they can be re-conditioned. We purchased 6 Bits only and have sent three to be re-conditioned, but we have not as yet, received a statement of the cost of re-conditioning.

MILL. We had a fall of ground in the Middle Level, which stopped the water-supply to the Mill for three days. When work was resumed, the main elevator caused trouble, and this, and two revolving screens had to be renewed. Milling was held up for the greater part of a week. Even now the Mill is not in as good a condition as I would like. It is almost impossible in England now, to obtain a spare part for any machine without waiting for months, and although we carry spare parts, we cannot guarantee to have a spare part for everything.

LABOUR. We still have 11 German Prisoners of War employed, mostly in the mine, with the others in the Hill and on the Watercourses. On the whole, most of

them have worked fairly well and we have had no trouble. The efficiency, not only of the P.O.W., but also of our own miners, is low, compared to pre-war standards.

**SALE OF LEAD ORE.** No Lead Ore was sold during the month. We can always sell what we have to the Smelters, Messrs, Walkers Parker & Co., Ltd., Newcastle, but by selling to the British Pyros White Lead Co. Ltd., West Drayton, we obtain a much higher price for the 1/5 mm. size. Messrs. Pyros wrote informing us that owing to shortage of labour, they were unable at present to accept further deliveries of our concentrates, much as they would have liked to do so. They hope that we will keep a supply 1/5 mm. ore in stock, for them to purchase when they obtain more labour.

**SALE OF GRAVEL.** The quantity of gravel (cuttings) sold during the month was 92.2 tons, for a profit of £23.30.

**PROBABLE SALE OF FLUOR SPAR HEAPS.** Nothing has been settled to date in the matter of Bostock and the V.M. Co. with regard to the sale of Fluor Spar Heaps. Samples have been sent to a London firm, whose representatives had previously called at Nenthead and stated that they were interested in purchasing our Fluor Spar Heaps.

**GENERAL.** Nothing further has been heard re: the claim for damages in respect of the restoration of the dump sites etc. There is no improvement in the general situation re: delivery of supplies of all kinds in the country. The outlook generally is not good.

| R o d d e r u p      M i n e.       |         |   |      |                          |            |      |               |
|-------------------------------------|---------|---|------|--------------------------|------------|------|---------------|
| Prospection South of Rodderup Vein. |         |   |      |                          |            |      |               |
| J. W. Robson & Partners.            |         |   |      | 98½ Days worked.         |            |      |               |
| Flat.                               | L       | W | S.F. | C.M.                     | H          | C.F. | C.M.          |
| B.1                                 | 12 x 11 | - | 132  | -                        | 12.26 x 12 | -    | 1584 - 44.85  |
| B.2                                 | 12 x 12 | - | 144  | -                        | 13.38 x 12 | -    | 1728 - 48.93  |
| B.3                                 | 14 x 10 | - | 140  | -                        | 13.00 x 12 | -    | 1680 - 47.57  |
| A.                                  | 4 x 10  | - | 40   | -                        | 3.72 x 5   | -    | 200 - 5.66    |
|                                     |         |   |      |                          |            |      | 5192 -147.01. |
| Tonnage to Mill:- 150 Tons          |         |   |      |                          |            |      |               |
| Wages Paid: £82. 1. 10.             |         |   |      | Cost per Cu.M.:- 11s/2d. |            |      |               |

## Report on the Nenthead Mines August 1947

R E P O R T  
on the  
N E N T H E A D      M I N E S  
A U G U S T      1 9 4 7

|                    | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------|-------------------|------------------|------------------|----------------|
| Ore mined          | 10 Tons           | Occupied by      | 155 Tons         | 155 Tons       |
| Ore milled         | Nil               | N.F.M.D.         | 175 "            | 175 "          |
| Lead Concs. prdcd. | "                 |                  | 8.70 "           | 8.70 "         |
| % Recovery         | "                 |                  | 4.96%            | 4.96%          |
| Hours worked       | "                 |                  | 45 hrs.          | 45 hrs.        |
| Tons per hour      | "                 |                  | 3.88 Tons        | 3.88 Tons      |
| Tons in stock      | 50 Tons           |                  | 10 Tons          | 60 Tons        |

### STOCKS.

|           | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-----------|-------------------|------------------|------------------|----------------|
| Crude Ore | 50 Tons           | 10 Tons          | 2300 Tons        | 2360 Tons      |

|                               |            |
|-------------------------------|------------|
| <u>Galena</u> , at Nentsbury, | Nil.       |
| <u>Galena</u> , at Rodderup,  | 1.766 Tons |
| <u>Witherite</u>              | Nil.       |
| <u>Fluor Spar</u>             | Nil.       |

### COMPRESSED AIR.

Nenthead & Nentsbury.      Compressed Air at Nenthead produced from water power, when required, about 300 cu. ft. per minute at a pressure of 90 lbs per square inch at Nenthead, and about 80 lbs pressure in Nentsbury Mine.

Rodderup.      Compressed Air produced at Rodderup from water power and electricity, about 550 cu. ft. per minute at a pressure of 85 lbs per square inch. All compressed air produced by water power, plus a small part produced by electricity is used for pumping. As from August 27th, no Compressed Air was produced from Electricity, as this was stopped after a fall in the Incline when mining operations were brought to a standstill.

## **NENTHEAD MINES**

### **AUGUST 1947**

NENTSBURY MINE. During the early part of the month, three miners were employed opening up a deposit of good ore in Nentsbury, between High Raise Vein and Treloar Vein. Towards the end of the month sufficient work had been done to enable me to make an inspection. The ore, where discovered in the bottom 5 feet of Liverick Vein, is in the Great Limestone. The width of the vein where found when I inspected it was about; 4 feet and the ore was of good quality.

If it continues, it may Extend to Treloar Vera, a distance of about 250 feet, but as the ore above the level was stoped out, the roof will have to be supported as the miners proceed North.

The value of the ore seen at present should meet all costs.

MILL. re: Damaged Aqueduct. Interviews and correspondence between Messrs. Blackburn & Main, and the County Council Surveyor, have proceeded during the month, terminating in an interview at Nentsbury on August 25th, between the Assistant County Surveyor and the District Surveyor and myself. The County Authority has promised to submit a plan to us, as soon as possible, for conveying the water under the main road, to Nentsbury Mill. Nothing final has been settled and will not be until Head Office has been consulted, but the suggestion is that the County Council will carry out the work, if the V.M. approves, bearing the costs of supplying the pipes and laying them under the road and also the pipes from the water supply on the hill to the road and from the road to the Mill, if the Insurance Company will defray the cost of both pipes and labour for both sides of the road. Directly an offer is made and a plan submitted, I will submit it to Head Office with my recommendation.

RODDERUP MINE. The particulars of the tonnage mined and milled, with recovery percentage, are given on the first page of this report. As described in a supplementary report attached to the Weekly Report for the week ending, Aug. 23rd, and in a further letter dated August 27th, a "fall" occurred on the Inclined tram-road in Rodderup Mine, on August 26th, and closed communication to the part of the mine where we have been working for several months now. Until the "fall" has completely subsided, I can add nothing to what I have already stated in the correspondence referred to.

MILL. In fair running condition.

LABOUR. All German P.O.W. were dismissed on the 28<sup>th</sup> August, and all cost reduced to a minimum, whilst maintaining the main level in Rodderup Mine, unless the fall referred to above does ultimately damage the main level. The Mill will be run to crush the stock of mine-ore and to redress slime residues in the slime pits.

SALES OF LEAD ORE. Messrs. Walkers Parker & Co., Ltd., Newcastle, purchased a parcel of Lead Ore, weighing 25.485 tons dry, which was delivered to them on August 28th. The British Pyros White Lead Co., our best customers

in regard to price, were unable to purchase our 1/5 mm. concentrates, owing to shortage of labour to work their plant. Messrs, Walkers Parker based their formula on a Lead price of £85 per ton, compared with the Government price of £90, the reduction being to cover increased coal and labour costs. I considered it advisable to accept their offer, as there are no smelters near Nenthead, and the Government would probably not consent to our transporting Lead Ore a long distance by either road or rail.

FLUOR SPAR DUMPS. As Mr. Bostock who made an offer in writing in May to purchase Fluor Spar from the Dumps, was unable to fulfil his commitments, I had an interview with him on August 22nd, and told him he must pay the legal expenses incurred by the Company in having an Agreement prepared, as approved by him, and that the Company would negotiate to sell the material elsewhere. He promised to pay the costs and I have instructed our Solicitors to demand them from him. In the meantime, Messrs. Basic Minerals Ltd. of London, are negotiating in regard to the dumps. They have received samples to be assayed and sent a transport contractor to see about removing the material. They have arranged, by telephone, to sample the dumps for themselves on September 3rd, as I considered it advisable in the V.M. interest, not to accept full responsibility for the sampling the heaps. If this Company should make an offer, it will be the subject of a legal agreement, and so far as values are concerned, they must be responsible for sampling the heap and estimating the quantities, etc. Representatives will visit Nenthead, after the sampling of the heaps, and after I have returned on Sept. 14th from my vacation, to discuss the matter with me.

SALES OF GRAVEL. 117.60 Tons of Gravel were sold during the month at the usual prices, the total profit being £29. 8. 0.

GENERAL. The rent of £50 due in respect of the Rampgill Mill for the quarter ended June 25th, has been received through Messrs. Blackburn & Main this month from the Ministry of Supply.

I can only repeat that the fall in Rodderup Mine has been a great disappointment and a source of anxiety to all concerned. Nobody could be blamed, and the mine foreman did all that was humanly possible, even to the point of danger to himself, after the fall began, to remove most of the tools and plant in the working places beyond the fall.

All leases in our possession, and all documents, have been collected from Messrs. Blackburn & Main, and are now in Nenthead Office, pending the visit of Messrs. Chaplain & Collon, expected towards the end of September. By that time there may be some definite information to report regarding the damaged aqueduct at Nentsbury and the Fluor Spar dumps.

Finally, I have to report that I shall be away from Nenthead from the 30th August to the 14th September, but should anything urgent occur, I shall be available to return by car within a few hours, or advise by telephone. The difficulties caused by the extreme winter weather of the first four months of the year, and the heavy responsibility and anxiety caused by lack of labour, the frequent meetings and other work involved by the damaged aqueduct and other matters, have rendered it necessary for me to have a complete rest previous to meeting Messrs. Chaplain & Collon.

# Report on the Nenthead Mines September 1947

## REPORT . \*\*\*\*\*

on the

## NENTHEAD MINES \*\*\*\*\*

SEPTEMBER 1947.  
\*\*\*\*\*

|                    | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup.</u>    | <u>Totals.</u> |
|--------------------|-------------------|------------------|---------------------|----------------|
| Ore Mined          | 10 Tons           | Occupied<br>by   | Nil.                | 10 Tons        |
| Ore Milled         | Nil.              | N.F.M.D.         | "                   | Nil.           |
| Lead Concs. prdcd. | "                 |                  | 2.534 Tons          | 2.534 Tons     |
| % Recovery         | "                 |                  | From Slime Residues |                |
| Hours worked       | "                 |                  | Odd hours daily.    |                |
| Tons per hour      | "                 |                  | Unable to estimate. |                |
| Tons in stock      | 60 tons           |                  |                     | 60 Tons.       |

### STOCKS.

|            | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------|-------------------|------------------|------------------|----------------|
| Crude Ore  | 60 Tons           | Nil.             | 2300 Tons        | 2360 Tons      |
| Galena     | Nil.              | 4.300 Tons       | Nil.             | 4.300 "        |
| Witherite  | Nil.              | Nil.             | Nil.             | Nil.           |
| Fluor Spar | Nil.              | Nil.             | Nil.             | Nil.           |

### COMPRESSED AIR.

Nenthead & Nentsbury. Compressed Air at Nenthead produced from Water Power, when required, 300 cu. ft. per minute at a pressure of 90 lbs per square inch at Nenthead and about 80 lbs per square inch in Nentsbury Mine.

Rodderup. Compressed Air produced at Rodderup from Water Power only about 250 cu. ft. per minute 24 hours daily. Owing to the fall in the mine, no electric power was used.



## **NENTHEAD MINES SEPTEMBER 1947**

NENTSBURY MINE. During the month two miners were employed in the early part of the month, breaking what ore they could from the bottom part of Liverick Vein. The ore, after being picked, is rich. The quantity, however, is small, as in addition to doing what mining as was possible after daily inspection of the main level as far as Wellhope Shaft and some distance East of the Shaft, there is only part of each day available for mining. Towards the end of the month, we succeeded in obtaining the hire of a small horse, but we had to provide a driver, to bring out the broken ore from the mine. We are proceeding to get the tonnage in stock brought out of the mine and transported to Rodderup to be milled.

MILL. Re: Damaged Aqueduct: - As previously reported in my Weekly Reports, meetings have been held at Nentsbury with the Assistant County Surveyor, and both Messrs. Blackburn & Main and myself have been pressing the County Surveyor to supply us with his report, sketch plan and estimate, which we eventually received towards the end of the month. After receipt of these, I met Mr. MacPhail and discussed the matter further with him. The County Surveyor's estimate amounted to £212, of which the County would pay £60 for the 15 inch diameter pipe under the County road, leaving £152 to be provided by the V.M. Co. from compensation to be paid by the Insurance Company. I requested Mr. MacPhail to point out to the County Surveyor, that the estimate did not provide for the supply and trenching, at a depth of about 11 to 14 feet, of a 6 inch diameter pipeline, 55 feet 3 inches long, to carry the water away when the 15 inch pipe-line was flushed, as will be necessary from time to time to prevent choking. I informed Mr. MacPhail that I considered that either the County should pay the cost of this work or the cost should be added to the Compensation paid by the Insurance Co. Mr. MacPhail agrees, and promised to discuss this further with the County officials and the Insurance Co. I have not heard anything since.

RODDERUP MINE. Nothing has been done respecting clearing the fall in Rodderup Mine.

During the early part of September, the fall, which was inspected daily, was still moving and it was dangerous to commence anywhere in the vicinity of the fall. After returning from my vacation on Sept, 14th, I inspected the fall on Sept. 16th and reported by letter to Head Office and Mons. Chaplain on the 18th. I can add nothing to what I stated then, except to report that no serious fall has occurred since, but we have located another fall which we consider occurred at the same time as the other fall, at the top of the Inclines on the North Side. This fall has filled to the roof, and on the North side no further trouble is expected at present. On the South side, and near the top of the Incline, the fall of rock has not yet filled the cavity to the roof. Consequently, any working there is dangerous. At the end of the month it was possible to get down to the level of the workings, by descending a Winze west of the fall, and walking back to Points A, B, and C, where no falls had occurred. I hope when Mons. Chaplain visits Nenthead, that he will be able to inspect these workings and the fall generally.

MILL. In fair running condition.



LABOUR. Only a limited number of men are employed to maintain the mine and to operate the Mill, whenever it is possible to do so. All Slime Fits outside the Mill building, have to be cleaned up and wheeled to the Slime Plant section of the Mill. This material contains probably up to 20% moisture and consequently in its wet state, which varies, even with the weather, it is impossible to estimate, even approximately, a close tonnage. The object of keeping a small number of men employed is to fulfil the conditions of the Lease, and also to reserve the labour until a decision has been reached re: Rodderup. Should the employees be paid off now, it is unlikely that they would return to Rodderup if they obtained suitable employment locally, which is available at present.

SALES OF LEAD ORE. The parcel of Lead Ore delivered to Messrs. Walkers Parker & Co., Ltd., Newcastle-on-Tyne, on August 28th, assayed 81.06% Pb., with 10.115 Oz's of Silver per ton. We received a cheque from Messrs. Walkers Parker & Co, Ltd., towards the end of September for £1508. 11. 11. In settlement for the parcel. After deducting cost of transport, the dry weight of the concentrates yielded £58.5 per ton.

SALE OF GRAVEL. Gravel sold amounted to 68.975 tons, and yielded a profit of £17. 5s. 11d.

FLUOR SPAR DUMPS. Messrs. Basic Minerals Ltd., of Fulwood House, Fulwood Place, London W.C.1, sent a Mrs. G. d'Anvers, a director of the Company, with two representatives of Imperial Smelting Corporation Ltd., Messrs. Burwood & Whelan, to inspect the Fluor Spar dumps on Sept. 30th. At their request, we had previously sent 1-cwt samples each of the Middle Level Dump, and Firestone Dump, Nenthead, to the I.S.C. Ltd. at Avonmouth for testing purposes. The Corporation wished to see that the dumps actually existed. The representatives stated that they were carrying out laboratory tests on the samples, with the object of producing a 98-99% Calcium Fluoride product. If they were successful they would negotiate to purchase the whole of the dumps, but they stated that it would be some weeks before they could prove whether the experiments would be successful. Since the interview, they have requested, by telephone, permission to employ a firm to bore through the heaps and take samples, to ascertain the calculated tonnage, and also to learn whether the material was of the same value throughout. We granted them permission to do this.

GENERAL. A further sum of £50 is due as quarter rent to Sept. 25th for Rampgill Mill from the Ministry of Supply, and Messrs. Blackburn & Main have already written requesting payment.

I returned from vacation on the 14th September as arranged. My health is much improved.

## Report on the Nenthead Mines October 1947

### REPORT on the NENTHEAD MINES OCTOBER 1947

|                   | <u>Nentsbury.</u>          | <u>Rampall.</u>         | <u>Rodderup.</u> | <u>Totals.</u>   |
|-------------------|----------------------------|-------------------------|------------------|------------------|
| Ore Mined         | 15 Tons                    | Occupied<br>by N.F.M.D. | Nil.             | 15 Tons          |
| Ore Milled        | 55 "<br>(at Rodderup)      |                         | ?                | 55 plus ?        |
| Lead Concs prdcd. | 3.25 Tons<br>(at Rodderup) |                         | 1.40 Tons        | 4.65 Tons        |
| % Recovery        | 5.9%                       |                         | ?                | 5.9 plus ?%      |
| Hours worked      | 13 hrs.<br>(at Rodderup)   |                         | ?                | 13 plus ? hrs.   |
| Tons per hour     | 4.23 tons<br>(at Rodderup) |                         | ?                | 4.23 plus ? tons |
| Tons in stock     | 20 Tons                    |                         | Nil.             | 20 tons          |

NOTE. Where "?" appears above, this refers to the re-treatment of Slime residues at Rodderup Mill, where it is impossible to estimate either the tonnage treated or the hours worked. The weight of crude from Nentsbury Mine, treated at Rodderup Mill, was closely estimated from the cubic footage of the lorry, and Royalty is due to Lord Allendale on the concentrates recovered. Royalty is due to the Greenwich Hospital Estates on the Slime Lead recovered from the Rodderup Slime residues.

#### STOCKS.

|                     | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|---------------------|-------------------|------------------|------------------|----------------|
| Crude Ore           | 20 tons           | Nil.             | 2300 tons        | 2320 tons      |
| Galena              | 3.25 tons         | 5.70 tons        | Nil.             | 8.95 tons      |
| <del>XXXXXXXX</del> |                   |                  |                  |                |
| Witherite           | Nil.              | Nil.             | Nil.             | Nil.           |
| Fluor Spar          | Nil.              | Nil.             | Nil.             | Nil.           |

#### COMPRESSED AIR

Nenthead & Nentsbury. Compressed Air produced from water power only, when required, 300 cubic feet per minute at a pressure of 90 lbs per square inch at Nenthead, and about 80 lbs per square inch at Nentsbury Mine.

Rodderup. Compressed Air produced at Rodderup from water power only, about 250 cubic feet per minute 24 hours daily, at a pressure of about 80 lbs per square inch. No electric power was used but owing to the agreement with The Mid-Cumberland Electricity Co., the V.M. must pay the K.V.A. charge for the remainder of the year, whether using electricity or not.

## NENTHEAD MINES OCTOBER 1947

NENTSBURY MINE. Two miners were fully employed in Nentsbury, and when drawing ore, a third man was employed part time. Fifty.-five tons of ore was drawn and transported to Rodderup to be crushed. From the ore crushed 3.25 tons of concentrates was produced, including Slime concentrates, the recovery being 5.9%.

Aqueduct. A settlement with the Company and the Cumberland County Council was completed by the end of the month. The County Council have undertaken to restore the water supply to the Mill by installing a 15 inch diameter pipe-line, from the source of supply, convey it under the road 1 meter below the surface, and deliver to the Mill. There will be a 4 inch diameter drainage pipe-line, connected to the 15 inch line to enable the latter to be flushed when necessary. The Council estimate the complete work to cost £222, for which they will supply the material and labour. The Council agreed to contribute £60 in respect of the pipe-line under the actual road, leaving the V.M. £162 to pay. We therefore claimed this amount, £162, from the Insurance Company, plus a Fee of £7. 7. 0. by Messrs. Michael Thompson Ltd for preparing an estimate for us, plus legal and other expenses. We have received a cheque for £175 from the Insurance Co., leaving £5. 15. 0. for our expenses after allowing for the above-mentioned items. The Insurance Co. settled Messrs. Blackburn & Main's expenses separately. We are pressing the County Council to complete the work as soon as possible.

MILL. In fair order, but the roof will soon require repairing.

RODDERUP MINE. There is nothing further to report re: Rodderup Mine, since Mons. Chaplain inspected the mine during his visit to Nenthead. The headgear at the East End Shaft has been repaired and preparations made for pumping out the water in this Shaft down to the 60 foot level, to enable us to examine the Flats at that level, we shall continue pumping, by Compressed Air produced by water power only, to the 20 fathom level even when examining the Flats.

MILL. In fair condition.

LABOUR. Only the minimum is employed.

### SALES.

Lead Ore. The stock at the month-end amounted to 8.95 tons, next month we shall transport more ore from Nentsbury to be crushed at Rodderup, When crushed and the weight of concentrates known, we shall offer what we have to Messrs. Walkers Parker & Co., Newcastle  
Gravel. Only 36.75 tons were sold, the profit being £8. 19. 5.

FLUOR SPAR DUMPS. The dumps at Middle Level, Rodderup, have been surveyed during the month by a surveyor employed by the Imperial Smelting Corporation, to arrive at an estimated tonnage, preparatory, we

understand, to sampling the heaps by boring. The Surveyor informed us by telephone, that his estimate was in the neighbourhood of 60,000 tons. At the end of the month we had heard nothing officially from either the I.S.C. or Basic Minerals Ltd. The I.S.C. were carrying out tests on 1 cwt samples from both Middle Level, Rodderup, and Firestone, Nenthead, heaps.

WITHERITE. Mr. Athole G. Allen of Stockton called on the 28th inst., and discussed the question of Witherite. He has since confirmed his offer of £7. 2. 6. per ton for Witherite concentrates of 90%, F.O.R. Alston or Nentsbury Mine, or £3. 2. 6. for a 90% Barium Sulphate concentrate. We have written Mr. Allen for elucidation of a small matter re: milled concentrates. This matter will be attended to.

## Report on the Nenthead Mines November 1947

### REPORT \*\*\*\*\*

on the

### NENTHEAD MINES \*\*\*\*\*

NOVEMBER, 1947.  
\*\*\*\*\*

|                    | <u>Nentsbury.</u>           | <u>Rampgill.</u>  | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------|-----------------------------|-------------------|------------------|----------------|
|                    | <u>Crushed at Rodderup.</u> |                   |                  |                |
| Ore mined          | 8 Tons                      | Occupied          | Nil              | 8 Tons         |
| Ore Milled         | 28 "                        | by<br>N.F.M.D.    | Small            | 28 "           |
| Lead Concs. prdcd. | 4.70 "                      | Quantity Residues | 0.25 Tons        | 4.95 "         |
| % Recovery         | 16.96 %                     |                   | ?                | 16.96% (N.)    |
| Hours worked       | 11.50                       |                   | ?                | 11.50 (N.)     |
| Tons per hour      | 3.73 Tons                   |                   | ?                | 3.73 Tons (N.) |
| Tons in stock      | Nil.                        |                   | Nil              | Nil.           |

Note: The 28 tons of ore treated at Rodderup Mill was mined from Nentsbury Mine, and produced 4.70 Tons of Concentrates. From Slime residues at Rodderup, 0.25 Tons of Concentrates were produced, making the total production from both mines, 4.95 Tons.

### STOCKS.

|            | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|------------|-------------------|------------------|------------------|----------------|
| Crude Ore  | Nil.              | Nil.             | 2300 Tons        | 2300 Tons      |
| Galena     | 1.328 Tons        | 5.950 Tons       | Nil.             | 7.278 "        |
| Witherite  | Nil               | Nil.             | Nil.             | Nil.           |
| Fluor Spar | Nil.              | Nil.             | Nil.             | Nil.           |

### COMPRESSED AIR.

Nenthead & Nentsbury. Compressed air produced from water power only, when required, 350 cubic feet per minute, at a pressure of 90 lbs per square inch at Nenthead, and about 80 lbs per square inch in Nentsbury Mine.

Rodderup. Compressed Air produced at Rodderup by water power only, about 250 cubic feet per minute 24 hours daily, ~~xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx~~ 7 days per week, at a pressure of about 80 lbs per square inch. No electric power was used, but, by the agreement, the V.M.Co. must pay for the remainder of this year the K.V.A. charge established while electricity was being consumed. No charge for K.V.A. can be made in 1948 until we use electricity.

## **NENTHEAD MINES NOVEMBER 1947**

NENTSBURY MINE. Two miners, and often three, were employed to maintain the main levels, break what Lead Ore they could, with also one miner, actually the foreman, preparing to break Witherite ore. In all, 28 Tons of Lead ore was broken, taken out of the mine, and transported to Rodderup to be crushed and treated for a recovery of 4.70 Tons of Lead Concentrates, the percentage recover being 16.96%. The ore was mined from the bottom of Liverick Vein between High Raise and Treloar Veins.

Aqueduct. The Cumberland County Council has delivered some of the 15 inch diameter pipes. They are good cast-iron pipes, about 1.5 inches thick. The work will be put in hand as soon as possible, weather permitting.

MILL. In fair order. The roof needs repairs, which we shall carry out as soon as possible, as we have most of the required materials.

RODDERUP MINE. During the month, the water in the two East End Shafts connected at the 20 fathom (56.57 metres) level below the Blackburn level, was lowered over 21 metres, and was 2.72 metres below the Flats where work was done in 1938. Owing to a fall in the Middle Level, which required the water supply to the hydro-Compressor being stopped while the Level Arch was repaired, the water rose in both Shafts, but not to the level of the Flats. From a brief inspection of the Flats, they are in good condition. Repairs to the Timber work and ladder ways of the main shaft have been completed. A further report will be sent later in December.

MILL. In fair condition.

LABOUR. We employ only the minimum labour force required, and, as far as possible after maintenance work, only on such work as is remunerative.

### SALES.

Lead Ore. During the month, we sold 6.622 tons of 1/5 mm. Lead Ore to the British Pyros White Lead Co., West Drayton, at a much higher price than we obtain from the Smelters, Messrs. Walkers Parker & Co., Ltd., Newcastle. This Co. will only accept 1/5 mm. ore, as Slime Lead is too fine for their purpose, and we shall sell this later to Messrs. Walkers Parker & Co.

Gravel. Owing to snow and frost, only 57 tons of gravel was sold, which realised a nett sum of £15. 0. 1d.

FLUOR SPAR DUMPS. During the month, Messrs. Johnson & Sons, of East Boldon, Co. Durham, have called and have visited the Middle Level Dumps, preparatory to boring and sampling them for the Imperial Smelting Corporation. This work has been held up by snow and frost, and possibly because the Surveyor for I.S.C. has been unable as yet to survey the Firestone dumps, at Nenthead. Part of the month the dumps have been covered with snow.

No doubt, Messrs. Johnson will arrange to bore and sample both heaps and are possibly awaiting the Surveyor's report.

WITHERITE. We are preparing a railway truck or large motor lorry load of Witherite, to be dispatched as soon as possible to Messrs. Athole G. Allen Ltd., Stockton-on-Tees.

## Report on the Nenthead Mines December 1947

| REPORT<br>on the<br>NENTHEAD MINES<br>DECEMBER 1947.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                   |                    |                           |                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------|-----------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <u>Nentsbury.</u>                                                                                                                                                                                 | <u>Rampgill.</u>   | <u>Rodderup.</u>          | <u>Total.</u>                     |
| Ore mined                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Nil                                                                                                                                                                                               | Occupied           | Nil.                      | Nil.                              |
| Ore milled                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | "                                                                                                                                                                                                 | by<br>N.F.M.D.     | "                         | "                                 |
| Lead Concs. prdcd.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 1.378 Tons                                                                                                                                                                                        |                    | "                         | 1.378 Tons                        |
| (Surplus on sale)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                   |                    |                           | Surplus when dry                  |
| % Recovery                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ? (not possible to state)                                                                                                                                                                         |                    | "                         | -                                 |
| Hours worked                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Nil.                                                                                                                                                                                              |                    | "                         | Nil                               |
| Tons per hour                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Nil.                                                                                                                                                                                              |                    |                           | Nil.                              |
| Tons in stock                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Unestimated stock in mine                                                                                                                                                                         |                    | Unestimated stock in mine | Unestimated stocks in both mines. |
| <p><u>Note:-</u> The unestimated quantities of Lead Ore in stock in both Rodderup and Nentsbury Mines, are ores broken in the Flats in Rodderup, and from the bottom of Liverick Vein in Nentsbury. The former is broken from a Flatx in the level 18.28 metres below the Blackburn Level to which it cannot be raised until the water has been pumped out to the 36.57 metre level, when the ore can then be hoisted up the No.1 Shaft. The ore in stock in Nentsbury Mine, is being accumulated until there is sufficient to run Rodderup Mill for one day.</p> |                                                                                                                                                                                                   |                    |                           |                                   |
| STOCKS.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                   |                    |                           |                                   |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <u>Nentsbury.</u>                                                                                                                                                                                 | <u>Rodderup.</u>   | <u>Wellhope.</u>          | <u>Total</u>                      |
| Crude Ore                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | ? quantity in mine                                                                                                                                                                                | ? quantity in mine | 2300 tons                 | 2300 tons                         |
| Galena                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Nil.                                                                                                                                                                                              | Nil.               | Nil.                      | Nil.                              |
| Witherite                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | about 5 tons hand picked in mine.                                                                                                                                                                 | Nil.               | Nil.                      | about 5 tons.                     |
| Fluor Spar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Nil.                                                                                                                                                                                              | Nil.               | Nil.                      | Nil.                              |
| Compressed Air.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                   |                    |                           |                                   |
| <u>Nenthead &amp; Nentsbury.</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Compressed Air produced only from Water Power and when required, 350 cu.ft. per minute, at a pressure of 90 lbs per square inch at Nenthead, and about 80 lbs per square inch in Nentsbury Mine.  |                    |                           |                                   |
| <u>Rodderup.</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Compressed Air produced at Rodderup from Water Power only, about 250 cu.ft. per minute, 24 hours daily and 7 days per week, at a pressure of 80 lbs. per square inch. No electric power was used. |                    |                           |                                   |



## **NENTHEAD MINES DECEMBER 1947**

NENTSBURY MINE. Three miners including the foreman, were employed during the month to maintain the main level and break what Lead Ore they could. The foreman, acting as a miner, broke and hand-picked a quantity of Witherite. Both Lead and Witherite Ores are stored in the mine, but early in 1948 a lorry load of about 7 tons of Witherite will be sent to Stockton-on-Tees for Messrs. Athole G. Allen Ltd.

The Lead Ore will be drawn and sent to Rodderup when we have sufficient to run the Mill there for a full day. Both the Lead Ore and Witherite, the latter hand-picked, are of good quality. The Lead Ore was broken from the bottom of Liverick Vein and the Witherite from 1st Sun Vain.

Aqueduct. So far, the Cumberland County Council has not done anything about restoring the water supply. I presume the Council is waiting for delivery of sufficient pipes to complete the work when the trench is opened through the main County road. Messrs Blackburn & Main have asked them to complete the work as soon as possible.

MILL. In fair order. Roof repairs will be carried out when the weather permits. Frost and snow are holding up this work.

RODDERUP MINE. At the end of 1947 the water in Nos.1 & 2 shafts was lowered to 32 metres below the Blackburn Level, and there is still 4.57 metres left to drain the water to the 20 Fathom (36.57 metre) Level. In the Weekly Report for Dec. 22nd-31st, I stated that we were pumping from Nos.1 & 2 Shafts, all the water in Rodderup Mine. This statement was not correct, because, although the 20 Fathom Level is driven a long distance West, it does not connect with the Level driven East from the West End Shaft. We are therefore draining from this area only by Nos.1 & 2 Shafts, the 20 fathom (36.57 metres) Level and all the workings East and West as far as driven. We are pumping by Compressed Air obtained by water power only, and as the water level is lowered, the displacement of water is slower, owing to the increased height the water has to be pumped. In one Flat, in the 18.26 metre Level, the ore is payable end is being stored in the mine until the water is lowered to the 36.37 metre level, when it will be put in the hopper which communicates with that Level and then drawn up No.1 Shaft to the Blackburn Level on route for the Mill. Repairs to the Ladderway and hopper have been carried out as the water is being lowered.

MILL. In generally good condition. Repairs to jigs and tables have been made during the month.

LABOUR. Four miners, including the foreman, are employed in the mine generally, with an odd man occasionally. Four men are also employed in connection with the Mill & Watercourses.

SALES.

Lead Ore. During the month all the Lead Ore, mainly from Slimes, was sold to Messrs. Walkers Parker & Co., Ltd., Newcastle-on-Tyne.

The dry weight when delivered gave a surplus of 1.378 Tons above our stocks. Our estimated percentage of moisture was higher than the actual. The ore contained, on the agreed analyses, 72.1% Pb. and 6.68 ozs Silver per ton. We are accordingly due about £439 from Walkers Parker, which equals approximately £51.5 per ton. We have received payment for the 6.622 tons despatched to the British Pyros Co. in November, the amount was £506. 11s. 8., equal to £76.5 Per ton. This ore was over 81%Pb.

Gravel. During the month, 218.5 Tons of stone, at 3s/- per ton, and Gravel, at 5s/- per ton, were sold, the profit amounting to £41.75

FLUOR SPAR DUMPS. The Imperial Smelting Corporation is carrying out the sampling of the Middle Level Dumps in a very thorough manner. The work is slow, the men employed by Messrs. Johnson & Sons, the Contractors engaged by I.S.C., being handicapped by snow, frost, and rain periodically.

GENERAL. The general position in regard to the mines and interests of the V.M. at Nenthead, at the end of 1947, will be dealt with in detail in the Annual Report for 1947, which will be posted by the end of January after payments due to the Company have been received and accounts in respect of 1947 have been delivered and paid.

The next Weekly Report will be for the period 1<sup>st</sup> Jan. to the 10<sup>th</sup> January 1948, and will be posted on or about January 13<sup>th</sup> 1948.

**ANNUAL REPORT  
On the  
NENTHEAD MINES  
1947**

NENTHEAD

During 1947, the Ministry of Supply released from the requisitioning orders of 1945, the sites of Hillersdon, Rampgill, and Smallcleugh dumps, the Brownley Hill site, and the accommodation road at Smallcleugh.

All these sites and roads were left in a state of dis-repair, and one Ropeway Standard, on the Hillersdon site, was left in a dangerous condition. Our solicitors, whom we consulted in the matter, advised the District Valuer at Carlisle, by whom the Release Notice was served, that the V.M. Co. could not accept the return of the property without an undertaking from either N.F.M.D. Ltd or the Ministry of Supply, or some other responsible Ministry, to either level the sites, repair the roads, and make the position safe in regard to the Standard, or to pay the V.M.CO. for carrying out the work. At the request of the District Valuer, we submitted a detailed claim for the cost of doing this work if requested, or the Ministry could do the work provided it was done to our satisfaction.

Much correspondence has passed and many interviews taken place between Messrs. Blackburn & Main and ourselves respecting the general situation, but up to the 31<sup>st</sup> Dec. 1947, no settlement had been reached.

The Rampgill Mill building is still occupied by N.F.M.D. (or the Ministry of Supply). In a letter dated Dec. 25<sup>th</sup> 1946, Mr W. C. C. Rose, then Director and Secretary of the N.F.M.D., stated that the property (Rampgill Mill and the dumps) would be released shortly, but nothing further has been heard in respect of Rampgill Mill Building. Much of the machinery has been removed and sent away, but the large Mill and other machinery is still in the building, while four men have been retained as watchmen on the property from December 1945 to December 1947.

On July 15<sup>th</sup> 1947, Mr R. H. Skelton, principal of the firm of Messrs. Pellew-Harvey & Co., wrote enquiring whether the V.M. Co. would be prepared to store the large Mill, the purchase of which he was negotiating for a period of 18 12 to 18 months. His letter was referred to Head Office, and on August 7<sup>th</sup> we informed Mr. Skelton that the V.M. Co. could not agree to storing the machinery and that we were anxious that any and all plant installed by the Ministry in the Rampgill Building should be removed as quickly as possible.

On Nov. 6<sup>th</sup> 1947, two representatives of Messrs. Geo. Cohen & Sons Ltd., buyers and sellers of second-hand plant and machinery etc., called at the Offices at Nenthead, with a list of what was then the property of N.F.M.D. and they also wished to know whether the V.M. would store any property purchased from N.F.M.D. They were informed that the V.M. would not consider entering

into any arrangements with any third party. Later the same month, Mr. Skelton made a personal visit but was informed that the V.M. Co. could not change its decision in the matter. Nothing further has since been heard from either party.

Two quarters' rent, amounting to £100, in respect of the Rampgill Mill Building up to Dec. 25<sup>th</sup> 1947, had not been paid to the V.M. Co. by Dec. 31<sup>st</sup> 1947. Messrs. Blackburn and Main made representations to the Ministry in regard to this, and payment is expected early in 1948. The transactions with Government departments have been most unsatisfactory and prolonged, and have entailed endless correspondence and interviews.

Referring to the Annual Report for 1946, and the question of the mistake of 51,219 tons which N.F.M.D. has made in the tonnage of dump material treated, payment on the basis of the reduced amount was finally agreed to by the V.M. Co. rather than incur heavy legal expense by taking the matter to the Law Courts, and the cheque for the amount involved was received early in 1947. Personally, I regard this mistake as typical of many made by N.F.M.D, and, as all the original staff employed by them in 1942-45 have now left, it is impossible to do anything further in this matter. During 1947, we also received a cheque for £78. 15. 0. In respect of costs connected with our claim for Compensation, which we eventually obtained after repeated applications had been made.

The position generally at Nenthead remained as at the end of 1946. During the year, we have repaired and maintained the 12" Dia. Pipe-line from Perry Dam to Middlecleugh Hydo-Compressor plant, and except for the extreme winter periods of February and March, when the water-courses and pipe-lines were buried under many feet of snow and ice, the plant was supplied with sufficient water to produce Compressed Air for Nentsbury Mine.

### NENTSBURY

Mine The programme of Prospection in the Quarry Hazel Stratum in Nentsbury Mine, which was commenced in 1946 from the bottom of a Winze near Wellhope Shaft, was stopped after Dupont Vein had been located in the Quarry Hazel in a X-Cut driven East from the X-Cut which was previously driven North from the Winze to cut Treloar Vein. No payable ore having been contained in any of the three Veins, Cox, Treloar and Dupont, where encountered in the Quarry Hazel, all prospecting work in this area was stopped, and all tools and materials, except the tram-roads, were drawn up to the main level and used elsewhere.

For the greater part of the year, only three miners were employed in the mine, including the Foreman, who, under the Mining Regulations, is compelled to inspect the main level and the working places daily and make a written report on a prescribed form for production whenever the Inspector of Mines visits the mine periodically. Work was confined to mining such Lead Ore as could be found, after maintaining the main levels in accordance with the terms of the Leases.

A body of ore, about 1.5metres in height and about 1 metre wide, was found in the bottom of the Limestone, on a portion of Liverick Vein, between High Raise Vein and Treloar Vein. During the year, up to the end of November 1947, we mined 65 tons of ore which was taken to Rodderup Mill and crushed there. Production from this, amounted to 7.95 tons of concentrates, giving a percentage recovery of 12.23%. At the end of December 1947, we had mined and stored in the mine, a further quantity estimated to be about 15 to 20 tons, but it is not anticipated that this source will continue as far as the Treloar Vein, and, being below the level of the tram-road, it is expensive to mine. The ore is of good quality, and the concentrates were principally sold to Messrs. British Pyros Co. Ltd. For the exceptional price of £76.50 per ton at Alston Station. The total net value of the 7.95 tons was £573. 14s. 7d.

In addition to the Lead Ore, we also produced a quantity of hand-picked Witherite ore, from the First Sun Vein. Several tons were brought out of the mine, but owing to the roads being blocked by snow, it was impossible to deliver it to the Stockton-on-Tees works of Messrs Athole G. Allen Ltd. Until the parcel has been delivered and assayed, it is impossible to state either the BaCO<sub>3</sub> content or the price to be obtained.

MILL. In January 1947, a lorry carrying a high load of baled hay, completely wrecked the Aqueduct supplying Nentsbury Mill and which crossed the main Alston-Nenthead road, with a clearance of about 15 feet. As the Aqueduct had been in existence before the road was made on this route, we had a legal right to continue using it, but with its destruction the Cumberland County Council were not prepared to agree to its re-erection. The owner of the lorry reported the accident to us, and advised us the name of his Insurance Company, to whom Messrs Blackburn & Main presented a claim on our behalf. Owing to the heavy snow falls which followed the accident, it was impossible for the Insurance Company's Assessor to view the damage until April, but meantime the County Council had informed us of their desire to avoid an impediment to modern traffic, which the restoration of the overhead water-channel would mean, and had asked to have the water conducted under the road, with suitable arrangements made at the supplying and receiving ends. Provided we were not involved in any expense, we were agreeable to the County Council's suggestion. Much correspondence and Interviews took place between ourselves, Messrs. Blackburn and Main, the Insurance Company, representatives of the County Council, until towards the end of the year, the Council offered to subscribe £60 towards the cost of putting 15" diam. pipes about 1 metre below the road, and would provide the pipes, carry out the work of excavation and laying the pipes from one side of the road to the other, including the connections with the points of delivery and supply to restore the water supply to the Mill, and also provide a flush-out valve with a length of 4" diameter pipe to conduct the flushed out water and matter from the 15" pipe-line to the old Wheel-Pit, the V.M.'s share of the costing £162. The Insurance Co. Agreed to pay us the sum of £175 and also pay Messrs. Blackburn & Main's expenses in the matter, and we accepted the County Council's offer. Of the £175 received we had to pay £7. 7s. 0. to a structural engineer, Mr. Michael Thompson, for an independent estimate and report, and we have to pay £162 to

the County Council when the work is completed, leaving a balance of £5. 13s. 0. to cover our incidental expenses.

Before the end of 1947, the County Council had delivered the 15" diam. pipes to go under the road, but bad weather conditions have prevented any work being done. Messrs. Blackburn & Main have been informed by the County Council that they will proceed with the work as soon as weather conditions permit. During 19647, no work was done in the Mill owing to this lack of water supply. It is in fair condition and slight repairs are affected to the structure and when necessary.

#### Recommendations for 1948

The Lease of the Allendale Concession of Nentsbury Mine can be terminated on June 30<sup>th</sup> 1949, at the earliest, by giving one year's notice in June 1948. The Lease of the Admiralty (Greenwich Hospital) Concession of the mine expires on Dec. 31<sup>st</sup> 1949. Until both leases are terminated or expired, we are obliged, under the terms of the leases, to maintain the main levels and shafts.

I therefore suggest that we produce during 1948, with as little cost as possible, such Lead Ore and Witherite as we can, to help towards meeting the cost we are compelled to incur in maintaining the main levels etc. Only such labour as we are compelled to employ would be engaged, or such additional labour, if available, as would increase the production of Lead Ore and Witherite to meet the cost of labour and materials and standing charges, and also to remove such machinery as we can before giving notice either for sale or as may be decided later.

#### RODDERUP.

MINE. 1947 was a most unfortunate year. Owing to an unprecedented winter, with successive heavy falls of snow and prolonged frost, the first three and a half months were unworkable, and all we could do with our limited labour force was to repair and keep open watercourses and repair the Hydro Tower and Shaft top at Rodderup. No work of any importance was possible in the mine during that period. Later we obtained the services of some German Prisoners of War, and confined all work in the mine to three Prospection Points A, B, & C. On August 26<sup>th</sup>, a heavy fall of ground occurred on the top of the two inclines, thus severing all communication to the Prospection Points just as we had struck payable ore, and the ore, some broken, had to be left in the Flats. The fall of ground was immediately under the main level, which was thereby weakened, and when Mons. Chaplain, during his visit to Nenthead in October, inspected the mine and workings, it was considered too expensive to attempt any more work in this area at present.

This was a most disappointing blow as had we been able to continue working and producing from this are, from the ore as seen, the output from Rodderup would have been considerably increased. As it was, the production from Rodderup, for what was actually only about four months output, and from ore which had commenced to improve weekly only in August, was 705 tons of cured ore from which 48.212 tons of Concentrates were recovered, a recovery of 6.838%

The percentage recovery was payable, and would have been profitable if more ore had been mined, especially when the ore which was good when the fall occurred had every appearance of continuing and even of improving. The 1946 results, for comparison were 665 tons mined, 29.45 tons of concentrates produced, with a recovery of 4.426%.

After consideration, it was decided to pump out the East End Shafts and go down to the 10 Fathom Level where Flats were worked in 1938. We got down to this Level (18.26metres) in good time, repaired the ladder-way, and re-timbered the shaft lining used as an ore-bin, and at the end of the year, we had pumped the water to a depth of 32 metres below the Blackburn Level. After cleaning the Flats, which were in good order, we found, after blasting, that one Flat was yielding payable ore and that another was almost payable. A tracing, from the Rodderup Mine Plan, is appended, showing the situation of these Flats. The ore mined, has been stored in the Flats, as, until the water is pumped down to the 20 Fathom (56.57 metres) we are unable to hoist the ore to the Blackburn level. This area offers scope for development, and at present it is encouraging.

The Lease of Rodderup Mine can be terminated at any time, by giving six calendar months' notice, but before doing so there is another matter to be taken into consideration, and that is the probably sale of the Fluor Spar Dumps at Middle Level, Rodderup.

These dumps were deposited by a Company or companies, which worked Rodderup Mine, mainly for Fluor Spar, previous to the V.M. Co. leasing the property. For many years, these dumps had no commercial value. In 1940, as a result of war-time demands for Fluor Spar, the dumps assumed some commercial value, but it was not great owing to the comparatively low grade of the material. However, Dr. R. C. Dunham of H.M. Geological Survey Department, surveyed these dumps on behalf of the Non-Ferrous Metals Control, and reported an estimated total tonnage of 60,000 tons as being available. He drew samples, principally from the surface and skirts of the dumps as no boring appliances were available, and the V.M. Co. had these assayed, the Calcium Fluoride content being 50.57%, and silica 33.57%.

In 1941, because of pressure from the newly formed Fluor Spar Control and the urgent national demand for Fluor Spar, we treated a parcel of about 150 tons of the crude material from these dumps, at Nentsbury Floor in intervals between dressing Lead Ore for which we were being equally hard-pressed by the responsible Government department.

As a result of this treatment at Nentsbury Mill, we obtained a produce which analysed 78.18% of Calcium Fluoride, and the silica content was reduced to 12.70% and 11.96%. We only recovered, in the form, about half of the tonnage treated, and although we were able to sell this produce, it was not an economical proposition when labour and transport were taken into consideration. The maximum price for Fluor Spar was still comparatively low, in spite of the demand throughout the country, and we did not pursue the matter

any further, especially as the labour position was becoming difficult through the increasing demands for the armed forces etc. It was in our best interests to concentrate such labour as we were able to retain, upon the production of Lead Ore.

Except for occasional and tentative enquiries re: Fluor Spar, no further interest in the Fluor Spar dumps was shown until May 1947, when Mr. J. Bostock, of East Gate, County Durham, wrote us and offered to purchase the whole of the dumps at a price of 11s/6d per ton on site. He stated that he would pay in advance for each 500 tons, and removed the material at the rate of 250 tons, on average, weekly throughout the year. He agreed that this should be embodied in a legal Agreement, which would also provide for him to maintain the waste heaps belonging to the V.M. Co. However, after he had amended the rate of removal from 250 to 200 tons weekly, he refused to sign the Legal Agreement when it was drawn up by our solicitors, after several months of negotiation, and on August 22<sup>nd</sup>, at an interview at Nenthead Office, he was informed that negotiations with him were terminated.

About that time, representatives of Messrs. Basic Minerals Ltd. Visited Nenthead to enquire about Barytes possibilities in the district, and as a result of a conversation with them, they undertook to find a market for the Fluor Spar dumps. Eventually they contacted the Imperial Smelting Corporation Ltd., and two representatives came and inspected the dumps, at Rodderup and at Nenthead, on Sept 30<sup>th</sup> 1947. The Corporation requested and were granted permission to survey the heaps, so as to estimate the tonnage, and to thoroughly sample the heaps by boring. On October 31<sup>st</sup>, after the survey of the Rodderup heaps had been completed, the surveyor informed me by telephone that he calculated the tonnage would be 60,000 tons. On Nov. 18<sup>th</sup>, representatives of Messrs. James Johnson & Sons, of East Boldon, County Durham, a firm of Boring Contractors who had been engaged by I.S.C., called and made a preliminary view of the heaps which they were to bore and sample.

Bad weather delayed the progress of this work, to some extent, but the work should be completed by early in 1948, and the examples tested. (Note: The boring and sampling was completed on January 16<sup>th</sup> 1948, and samples sent by road transport direct to the I.S.C.'s works and laboratories at Avonmouth, near Bristol). The work has been done very thoroughly, with a large number of samples having been taken, and the I.S.C. must have spent some hundreds of pounds surveying and sampling.

At a price of 11s/6d per ton on site, the material, after allowing the requisite 1s/- per ton Royalty and 6d to cover the rates charged by the District Council on Royalties paid, is worth 10s/- per ton nett to the V.M. Co. The final point is, that if the dumps or even part of them are worth 10s/- per ton to the V.M. Co., and if the material is removed at the rate of 800 to 1000 Tons per month, which is what is visualised, the V.M. will earn more than enough money from this to meet all Rodderup costs for maintaining the Mine and Mill, with the fairly certain prospect of additional revenue resulting from the production of some quantity of Lead Concentrates.



The right to mine or sell Fluor Spar is not included in any of the Mining Leases held by the V.M. Co., but as a result of the interest shown in 1940, an Agreement with the Greenwich Hospital Estates was entered into personally by myself, on behalf of the V.M. Co., as Head Office would not be contacted through the occupation of Belgium by the enemy. The Agreement was for three years, and has since been twice extended, the present period expiring in June 1949, and it gives the V.M. Co. the right to mine and sell Fluor Spar in or from any of areas held under the mining leases granted by the Greenwich Hospital, on payment of a royalty on 1s/- per ton of Flour Spar sold. Therefore, if the lease of Rodderup Mine is surrendered immediately, the V.M. will lose potential value of the Middle Level Fluor Spar dumps. I therefore consider it would be good judgement to wait until we learn what the decision of I.S.C. is after they have completed their investigations, before taking any measures to terminate the Rodderup Fell Mining Lease. We have been, and are, pressing them to advise us of their decision as quickly as possible.

Meantime, while awaiting this decision, we can produce some Lead Ore, at least, from the 10 Fathom Level in Rodderup Mine, as soon as the water is pumped down to the 20 Fathom (56.57metres) Level and the ore, already mined, can be drawn out and dressed. To hasten this de-watering, we are installing a second compressed-air blower manufactured by ourselves from piping in stock.

LABOUR After trying to obtain additional labour from various sources in the early part of the year, we were at last successful in obtaining German Prisoners of War to work in the mines, but after the fall of ground in August, we dispensed with their services. Some worked well and the others no so well, but on the average, they were not good miners. Now, most of the Prisoners have been repatriated. The supply of local labour is limited and likely to remain so for some time. Four small coal-pits locally have been granted licences to work, and have engaged some of the available labour supply. These, with agriculture, have first priority, as both coal and food production is in great demand in England. In addition, many new houses are being constructed in Alston Moor, and local labour is also engaged on these. A Foundry at Alston is working night and day producing goods for export, and are also employing local labour and are able to offer attractions to men and women living near the works.

GENERAL Total sales for the year from Nentsbury and Rodderup, including the 6.540 Tons of Lead Ore in stock at Rodderup on Dec. 31<sup>st</sup> 1946, were as follows: -

|                          | <u>Tonnage</u>   | <u>Net value</u> |
|--------------------------|------------------|------------------|
| Nentsbury Lead Ore       | 7.950 Tons       | £573. 14s. 7d.   |
| Rodderup       “       “ | 54.662       “   | £3547. 18s. 7d.  |
| Fluor Spar               | Nil.             | Nil.             |
| Witherite                | Nil.             | Nil.             |
| Stone & Gravel           | 1004.100       “ | £223. 0s. 6d.    |

FINANCE The Bank Balance on December 31<sup>st</sup> 1947 was £8249. 8s. 6d. This included the amount of £162 which will have to be paid to the Cumberland

County Council when the work of restoring the water supply to Nentsbury will be completed.

To be able to give a closely approximate estimate of the loss for 1947, a member of Messrs. Greaves & Co., our auditors, visited Nenthead, and, as far as possible, up to date (Janry 21<sup>st</sup> 1948), gave the approximate loss as between £5300 and £5500. All accounts had not been received and amounts for Royalties due to the Landlords having been computed by us but not agreed yet by the Landlords. The estimated loss, however, provided for all expenditure and revenue related to 1947 and for all debtors and creditors at 31<sup>st</sup> December 1947, including the amount of £162 which has to be paid to the Cumberland County Council, and the amounts of Royalties which we calculated would have to be paid in respect of the second half of 1947. Also, included in the expenditure was the amount of £300 paid to the Collector of Taxes, in respect of Schedule A Income Tax of £100 per year for each of the three years 1943/4, 1944/5, and 1945/6. These demands were only made in November 1947, and were in respect of the £200 per annum rent which we receive for Rampgill Mill Building. Both our Solicitors and our Auditors advised us that, as the law stood, we were bound to meet these demands, although personally I considered them most unjust as, had the premises been let by a voluntary arrangement, instead of having been requisitioned, we could have obtained a much higher rent and we did in fact originally ask for a rent of £550 from the Ministry for the premises. There was a further assessment of £90 for the year 1946/7, the £10 difference being accounted for by the reduction of the standard rate of Tax from 10s/- to 9s/- in the £. that year, and our Auditors are disputing this with the Inspector of Taxes, claiming that this Tax cannot be demanded when the Trading Account shows a loss, as we did in 1946/7.

No account has been taken of the quantity of Witherite produced in Nentsbury mine in 1947 but not recorded until it was despatched early in January 1948, nor of the crude Lead Ore stored in both Nentsbury and Rodderup Mines at the end of the year. By the end of February, weather permitting; we hope to have the final balance sheet for 1947 completed. The estimated loss might have been considerable less had it not been for two factors. The first of these, to be taken into consideration, was the extremely bad weather, the worse known in living memory, in the early part of the year and which, for three months, at least, held up all work at Rodderup, the Mill machinery being frozen and the water-course blocked, in spite of all our efforts to prevent this. The second factor was the fall of ground on August 26<sup>th</sup>, which completely isolated the area where we had been prospecting and where we were just beginning to reap the benefit of our work there. Actually, we only worked, from a production viewpoint, about 4 months at Rodderup.

LEASES. During Mons. Chaplain's visit in October the Mining Leases held by the Company in the Alston Moor District, were carefully studied and Mons. Chaplain subsequently reported direct to Head Office upon the principal features governing the termination of these. Following his visit, instructions were received from Head Office to take the necessary measures to terminate the leases, and reference to the terminations of these leases has already been made in the sections of this report dealing with Nentsbury and Rodderup

respectively. The Nentsbury Mine Allendale Lease could not be terminated before June 30<sup>th</sup> 1949 at the earliest, but the Nentsbury Greenwich Hospital Lease could possibly have been terminated on Dec. 31<sup>st</sup> 1948, if notice had been given in December 1947. However, as, under the terms of the Lease, the main levels etc., in the Allendale Concession have to be maintained in good condition until the date the Allendale Lease is surrendered, and as the Allendale Concession can only be approached through the Greenwich Hospital (or Admiralty) section of Nentsbury Mine because Wellhope Shaft is hoisting and ventilation shaft not equipped with a ladder-way, it was considered advisable to retain the G.H. Lease until after the Allendale Lease had been terminated on June 30<sup>th</sup> 1949. The G.H. Lease automatically expires six months later on Dec. 31<sup>st</sup> 1949.

The Nenthead Mining Lease, which includes the Priorsdale and Perry Dam Water Rights, also expires on Dec. 31<sup>st</sup> 1949, and while Nentsbury Mine, in both the Allendale and G.H. Concessions, has to be maintained, the Nenthead Lease is necessary.

Rodderup Mine Lease, as previously stated can be terminated at any time by giving six months notice, but it is recommended that notice should be with-held until after a decision has been reached by the Imperial Smelting Corporation in regard to the Fluor Spar Dumps, as explained in Pages 8 and 9 of this report.

In addition to the Mining Leases, the V.M. Co. owns a long lease for the unexpired portions of periods of 1000 years, dating from about 1600, certain properties in the district, and information concerning this property is at present being obtained from Head Office, and other sources if possible.

All the Mining Leases are now in the possession of Messrs. Blackburn & Main, who are taking the necessary steps to ensure that they are surrendered in with the instructions given by the General Managing Director, and they are also reviewing the situation in regard to the final winding up of the V. M. Co.'s interests in this area.

N.F.M.D. The position concerning the V.M. and the N.F.M.D. has been largely dealt with in the earlier part of this Report, and particulars concerning the properties de-requisitioned during 1947 and of our Compensation Claim in detail, have been sent during the year to both Head Office and Mons. Chaplain. Our final claim, however, which will be in respect of damage to the structure of Rampgill Mill Building and to the plant and machinery originally contained when the Building was requisitioned, can only be made after the Building has been released from the requisitioning order. I anticipate that this will be a difficult claim to compute, and there will probably be even greater difficulty in securing the amount we eventually claim.

CUMBERLAND COUNTY COUNCIL: The Cumberland County Council made no further approach to us during 1947 with regard to the proposed new road in Nenthead, which would pass over property owned by the V.M. Co. Part of the land over which the road would pass, may or may not be owned by the V.M. Co., or it may be owned by the Greenwich Hospital. In the absence of a large

scale plan or map, clearly defining the boundary of the property purchased from the old Nenthead & Tynedale Company, and further property purchased later from a Mr. John Cowing, there is some doubt in my mind whether the V.M. Co. does own a portion of the ground, and I am of the opinion that the Greenwich Hospital are of the same opinion. The tracing of the lands coloured Pink and Brown (or Yellow), does not clarify the position.

ALSTON RURAL DISTRICT COUNCIL: When Mons. Chaplain visited Nenthead, we had an interview with Mr. Hamilton Russell, now principal of Messrs. Wm. Armstrong & Sons, the mineral representatives of Greenwich Hospital, and the question of the Water Rights in Priorsdale and Perry Dam, which the District Council are seeking to acquire, was discussed. Mr. Russell expressed his opinion that the Water Rights should not be interfered with, and, as he was leaving for London the following day, he would raise the question with the Director, who acts for the Admiralty in the matter of the Greenwich Hospital Estates. I have not heard from Mr. Russell since that date in October, except for a telephone conversation in December, when he promised to visit Nenthead early in 1948 to discuss matters generally.

To conclude this report, I have once more to express my appreciation and gratitude for the ready assistance rendered by Mr. A. M. MacPhail, Senior Partner of Messrs. Blackburn & Main, of Carlisle, legal advisers to the V.M. Co. for many years, and by the Staff at Nenthead generally, in what has been a very arduous year.

Nenthead.  
27<sup>th</sup> January 1948

## Report on the Nenthead Mines January 1948

### REPORT \*\*\*\*\*

on the

### NENTHEAD MINES \*\*\*\*\*

JANUARY 1948.

|                    | <u>Nentsbury.</u>               | <u>Rampgill.</u> | <u>Rodderup.</u>   | <u>Total.</u> |
|--------------------|---------------------------------|------------------|--------------------|---------------|
| Ore Mined          | 30 Tons                         | about 50 Tons    |                    | 80 Tons       |
|                    | (Including 20 in stock in mine) |                  | (in stock in mine) |               |
| Ore Milled         | 30 Tons                         | Occupied         | Nil.               | 30 "          |
|                    | (at Rodderup)                   | by               | (from Rodderup)    |               |
| Lead Concs. Prdcd. | -                               | N.F.M.D.         | 4.00 Tons          | 4.00 Tons     |
|                    |                                 |                  | (ex Nentsbury Ore) |               |
| % Recovery         | 13.3%                           |                  | -                  | 13.3%         |
| Hours Worked       | -                               |                  | 8 hrs              | 8 hrs.        |
| Tons per hour      | -                               |                  | 3.75 Tons          | 3.75 Tons     |
| Tons in Stock      | Nil.                            | Estimated        | 50 "               | 50 "          |

Note: All Nentsbury Ore was crushed in Rodderup Mill.  
There is now no ore in stock. In Rodderup Mine  
about 50 Tons of payable ore is broken and is stored in  
the Eastern Flats. All being well this ore will be  
crushed during February.

### STOCKS.

|            | <u>Nentsbury.</u> | <u>Rodderup.</u>  | <u>Wellhope.</u> | <u>Totals.</u> |
|------------|-------------------|-------------------|------------------|----------------|
| Crude Ore  | Nil.              | Estimated 50 Tons | 2300 Tons        | 2350 Tons      |
| Galena     | 4.00 Tons         | Nil.              | Nil.             | 4.00 "         |
| Witherite  | 3.30 "            | Nil.              | Nil.             | 3.30 "         |
| Fluor Spar | Nil.              | Nil.              | Nil.             | Nil.           |

### Compressed Air.

Nenthead & Nentsbury      Compressed Air produced from Water Power only  
and when required, at about 350 cubic feet per  
minute at a pressure of 90 lbs per square inch  
at Nenthead and about 80 lbs per square inch at Nentsbury.

Rodderup.      Compressed Air produced at Rodderup from Water  
Power only, at about 250 cubic feet per minute  
24 hours daily and 7 days per week, at a pressure of 80 lbs per  
square inch.

## **NENTHEAD MINES JANUARY 1948**

NENTSBURY MINE. Three miners, including the foreman, were employed during the month to maintain the levels and break Lead Ore and Witherite whenever possible. The Lead Ore, 30 tons in all, was transported to Rodderup and crushed and washed in the Mill there. The result was 4 tons of Lead Concentrates, the recovery being 13.3% of the Witherite Ore, 5.7 Tons was delivered by motor-lorry to Athole G. Allen (Stockton) Ltd. The final assay results were: - 94.5% of Witherite, 1% Barytes, 2.15% Silica, 1.54% Iron Oxide, a trace of Lead, Calcium, Nil, and Zinc, Nil. This small parcel is high grade, and a statement has been sent to Messrs. Allen for payment.

I am sorry to report that the Lead Ore in the Liverick Vein, in the bottom of the Limestone, has been worked out owing to the stratum rising as it approached Treloar Vein.

One miner left our employ at the end of the month. The foreman and one miner will mine Witherite ore in the meantime.

MILL. The Cumberland County Council has delivered the pipes for restoring the Water Supply, and, weather permitting, they will lay the pipes as soon as possible.

RODDERUP MINE. Work in one Flat in the 10 Fathom (18.28 metres) Level, has been continued, and payable ore has been mined and stored, pending the installation of a winch, removed from Nentsbury Mine, to hoist the ore to the Blackburn Level. This arrangement will avoid waiting until the water is lowered to the 20 Fathom Level (36.57 metres).

A depth of about 3 metres remains to be pumped out before the 36.57 metres Level is reached, and this may take some little time, as the workings in this area extend East and West for a considerable distance thus increasing the volume of water now to be pumped, while the height to be pumped is also increased. Another Compressed Air "Blower", was put in commission at the end of the month to assist in de-watering the area.

MILL. In good running order.

LABOUR. No change.

### SALES.

Lead Ore. None was sold during the month, but payment was received of all amounts outstanding at Dec. 31st in respect of Lead Ore.

Witherite. 5.70 Tons of hand-picked Witherite was sold at a nett price at Nentsbury, of £7. 10s. 4d. per ton, giving a total of £42. 16s. 11. for the parcel.

Gravel. Owing to bad weather conditions only 1 ton of gravel was sold realising 5s/-.

FLUOR SPAR DUMPS. Negotiations re: the selling of the dumps have continued during the month, but no agreement was reached by the end of the

month. Messrs. Johnson & Sons bored and sampled the Middle Level Dumps at Rodderup, and the samples were sent by road to Avonmouth to be tested by Imperial Smelting Corporation, through the medium of Messrs. R. S. Graham & Co. Ltd., who contacted I.S.C. originally. My personal opinion is that whoever negotiates for the purchase of the dumps, may ask for some time to erect a plant to treat the material. Nothing, however, has been settled yet, and when, and if, there is, a Legal Agreement will be prepared by Messrs. Blackburn & Main. The conditions in this country are such, that an Agreement with legal conditions, is imperative.

GENERAL. Nothing further has been done by N.F.M.D. or any Government Department. Messrs. Blackburn & Main have sent claims for compensation, but up to the end of January had received no reply. It is almost impossible to get anything settled, because the Government changes the officials frequently and appointments have to be made with new officials, who, apparently, have to submit everything to London for inspection and approval.

## Report on the Nenthead Mines February 1948

| REPORT<br>on the<br>NENTHEAD MINES<br>FEBRUARY 1948 |                         |                  |                     |               |
|-----------------------------------------------------|-------------------------|------------------|---------------------|---------------|
|                                                     | <u>Nentsbury</u>        | <u>Rampgill.</u> | <u>Rodderup.</u>    | <u>Total.</u> |
| Ore Mined                                           | 4 Tons<br>(Witherite)   | Occupied<br>by   | 10 Tons<br>60       | 14 Tons       |
| Ore Milled                                          | Nil.                    | N.F.M.D.         | <del>60</del> "     | 60 "          |
| Lead Concs. prdcd.                                  | Nil.                    |                  | 3.59 "              | 3.59 "        |
| % of recovery                                       | "                       |                  | 5.83%               | 5.83%         |
| Hours worked                                        | "                       |                  | 13.5 hrs            | 13.5 hrs      |
| Tons per hour                                       | "                       |                  | 4.44 tons           | 4.44 tons     |
| Tons in stock                                       | 1.3 Tons<br>(Witherite) |                  | 7.00 "<br>(in mine) | 8.30 "        |

---

| <u>STOCKS.</u>   |                                                          |                       |                  |                |
|------------------|----------------------------------------------------------|-----------------------|------------------|----------------|
|                  | <u>Nentsbury.</u>                                        | <u>Rodderup.</u>      | <u>Wellhope.</u> | <u>Totals.</u> |
| Crude Mine ore   | Nil.                                                     | 7 Tons<br>(Estimated) | 2300 Tons        | 2307 tons      |
| Galena           | 4.00 Tons                                                | 3.50 Tons             | Nil.             | 7.50 "         |
| Witherite        | 1.30 "                                                   | Nil.                  | Nil.             | 1.30 "         |
| Fluor Spar Dumps | 60,000<br>(Calculated tonnage of<br>Middle Level Heaps.) |                       |                  | 60,000 "       |

Note: During the month, 6 Tons of Hand-picked Witherite from Nentsbury was delivered to Messrs. Athole G. Allen (Stockton) Ltd., the analysis being agreed as follows:- SiO<sub>2</sub>, 1.6%; BaCO<sub>3</sub>, 95.37%; Insol. -, BaSO<sub>4</sub>, 0.40%; ZnO, 0.30%; CaCO<sub>3</sub>, 0.89%; and Fe<sub>2</sub>O<sub>3</sub>, Al<sub>2</sub>O<sub>3</sub>, 0.90%; total, 99.46%

---

| <u>Compressed Air.</u>           |                                                                                                                                                                                                 |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>Nenthead &amp; Nentsbury.</u> | Compressed Air produced from Water Power only when required, about 350 cu. ft. per minute at a pressure of 90lbs per square inch at Nenthead and about 80lbs per square inch in Nentsbury Mine. |
| <u>Rodderup.</u>                 | Compressed Air produced at Rodderup from Water Power only, at about 250 cu.ft. per minute, 24 hours daily and 7 days per week, at a pressure of 80 lbs per square inch.                         |



## **NENTHEAD MINES FEBRUARY 1948**

NENTSBURY MINE. Two miners, including the foreman, were employed during the month, to maintain the levels and break what Witherite Ore they could and hand-pick it.

No lead Ore was mined, the good ore previously mined from Liverick Vein, between High Raise and Treloar Veins, had been cut out by the strata rising. As a consequence, the Limestone in which the Lead Ore was found, rose above the level in which work was being done, and the ore above this level was mined about 20 years ago. Four tons of hand-picked Witherite Ore was mined, and 6 tons despatched Messrs Athole G. Allen (Stockton) Ltd., the assay result of this parcel being given on Page 1 of this report.

MILL. After an improvement in the recent severe weather, the Cumberland County Council commenced the work of restoring the water supply to Nentsbury Mill.

RODDERUP MINE. Some drilling was done in the Flat in the 18.28 metres Level, and altogether 60 tons of ore was raised and sent to the Mill. 3.50 Tons of Lead Concentrates were recovered, equal to 5.83% recovery. The second new compressed air blower, to lower the water level, has been put into commission and is working satisfactorily. Compressed Air used, is obtained from water power only. Consequently, during the 5 hours the miners are drilling, the compressed air is used for drilling and hoisting only, pumping being confined to the 16 to 18 hours, for six days a week, when the air is not required for the other purposes. At weekends, the Compressed Air blowers work 24. hours daily. Snow and frost during the month prevented the full use of the hydro Compressor.

MILL. Owing partly to the frost and snow, the Mill was unable to work for several days, and repairs had to be done to water-pipes, rolls and crusher, more repairs remaining to be done later when not crushing. The difficulty is delay in obtaining new parts, and to enable us to keep the Mill running, we have to use old material as much as possible. Everything that can be used for export, is sent out of the country.

LABOUR. There is great difficulty in obtaining capable men. The German P.O.W. Camp at Alston is closed and the Prisoners ex-patriated. With a Foundry and a Factory operating at Alston, and a house-building scheme in force in the district, labour will be in short supply for some time. Men with families who are exempt from Income Tax are in demand, because they are prepared to work full time. Single men, and men with no families, are liable for Income Tax as soon as their earnings reach a certain level, and this causes them to absent themselves after they reach this level, as they will not work full time and pay Income Tax.

SALES.

Lead Ore. None sold.

Witherite. 6 tons sold to Messrs. Athole G. Allen

Gravel. 71.875 tons were sold, the net amount received being £17. 19s. 4d.

FLUOR SPAR DUMPS. Negotiations with Messrs. R. S. Graham & Co. Ltd. (also known as Basic Minerals Ltd.), and through them, with Messrs. Imperial Smelting Corporation Ltd., have continued throughout the month. Much correspondence, many telephone discussions, and a visit to Nenthead by Mr. R. Graham-Seatoun (principal of Messrs. R. S. Graham & Co. Ltd.) have taken place, and the main features reported to Head Office, with copies of the more important letters.

I have also kept Messrs. Blackburn & Main fully informed of the developments, in order that the legal aspects might be assured.

The main point now at issue, is the ultimate date to be allowed for the material at the Middle Level Dumps, calculated by I.S.C. after a comprehensive survey at 60,380 Tons.

In all the terms proposed by us, we stipulated June 30<sup>th</sup> 1949, the date when our present Agreement with the Admiralty for the working of Fluor Spar, as the date when removals should be completed. We offered to sub-divide the tonnage into parcels of 20,000 Tons each, the first to be removed by December 31st 1948 and the second by June 30<sup>th</sup> 1949, but the I.S.C. could not accept this. If, as now seems fairly certain, the samples taken from the Middle Level Dumps are proved to be of the quality they expect, they wish to purchase the whole of these dumps, as the capital outlay on new plant will not be justified unless the whole estimated tonnage of about 60,000 tons can be treated. Also, the erection of new plant will take some time, and orders for the material and equipment cannot be placed until the tests upon the samples are completed, so I.S.C. are unable to commit themselves to taking any particular or specified tonnage before June 30<sup>th</sup> 1949. They will undertake to remove the material as speedily as possible, but they wish to have until June 30<sup>th</sup> 1951 or even December 31st 1951 to complete the removal.

To extend the date to then, would mean that the V.M. Co. would have to seek an extension of the Fluor Spar Agreement with the Admiralty, and most probably, an extension of the Rodderup Fell Mine Lease, as the Agreement covers Fluor Spar in the areas held under the Mining Leases from the Admiralty.

In all other respects the I.S.C. are prepared to meet our terms, and have offered to pay a deposit of £5,000 within four days of our accepting the offer. If they wish to proceed further, and this will depend upon the results of the samples, they will pay a further sum of £12,500 by May 7<sup>th</sup> 1948, making a total of £15,500 for this year, with further payments of £15,500 by the 30<sup>th</sup> June 1949 which will be roughly equivalent to two thirds of the estimated gross tonnage of 60,380 tons at 15s/6d per ton site. They would pay a further £7,750 by June 30<sup>th</sup> 1950 with the remainder to be paid either by June 30<sup>th</sup> 1951 or December 31st 1951 after the correct tonnage had been ascertained on the completion of the removal of the dumps. If the I.S.C. do not proceed further after paying the £5,000, this sum will be forfeited to the V.M.

In a letter to head Office, dated March 5<sup>th</sup>, I have recommended that the offer from I.S.C. be accepted, for the reasons stated therein. I believe that this action

would be in the best interests of the V.M., as it would provide an assured income and the expense of extending the Agreement and the Rodderup Mine Lease would be negligible, while the V.M. is bound by the terms of the Nenthead and Nentsbury Mining Leases to maintain for some years the property and be responsible for damages etc. after the expiry of those Leases on December 31st 1949.

In addition to the Middle Level Leaps at Rodderup, there are also the Firestone Fluor Spar heaps at Nenthead, and these are estimated to contain from 20,000 to 60,000 Tons. They are at present being bored and sampled by I.S.C. It is impossible to state yet whether I.S.C. will wish to purchase these Firestone Dumps, but if the samples prove the contents are similar in value to Middle Level, it is most probable that they will wish to purchase.

It would appear, from the documents covering the transactions between the old Nenthead & Tynedale Lead Co. and the V.M. Co., of 1896, that these Firestone Heaps were purchased by, and stand upon ground purchased by, the V.M. I discussed the position with Messrs. Blackburn & Main in Carlisle on the 27th February, and they are closely studying the documents, which, however, are rather obscurely phrased and difficult to interpret. There remains the possibility, however, that there is about, say, 25,000 tone of material, which at 15s/6d per ton gross, of 11s/- per ton nett after allowing commission at 3s/- per ton, royalty at 1s/- per ton and rates etc. at 6d per ton, would mean an additional revenue of £13,750 nett. With this further prospect, it would not seem advisable to allow the Fluor Spar Agreement and the Rodderup Mine Lease with the Greenwich Hospital (Admiralty) to lapse.

In my letter of March 5<sup>th</sup>, I have asked for a decision from Head Office, preferably by cable, in the matter of the offer received from I.S.C. Until this decision is received, no farther progress can be made in the negotiations, although meanwhile both the old documents regarding the transactions with the Nenthead & Tynedale Company, and the proposed terms of purchase by I.S.C. (which, other than the period allowed for removal, are substantially what we proposed) are being studied by Messrs. Blackburn & Main, and the I.S.C. are proceeding with the sampling and boring of the Firestone Heaps.

GENERAL. There is nothing to report in regard to the N.F.M.D. respecting our claim for compensation for the dump sites, or from the Alston District Council respecting the proposal to take over the Perry Dam & Priorsdale Water Rights. During the month, there were further falls of snow and severe frost at times, which hampered progress generally, without approaching the dislocation caused by the storms of a year ago. By the end of February, conditions had commenced to improve and the snow was rapidly disappearing.

## Report on the Nenthead Mines March 1948

| REPORT<br>on the<br>NENTHEAD MINES<br>MARCH, 1948 |                            |                  |                  |
|---------------------------------------------------|----------------------------|------------------|------------------|
|                                                   | <u>Nentsbury.</u>          | <u>Rampgill.</u> | <u>Rodderup.</u> |
| Ore Mined                                         | 8.9875 Tons<br>(Witherite) | Occupied         | 72 Tons          |
| Ore Milled                                        | Nil.                       | by<br>N.F.M.D.   | 89 "             |
| Lead Concs. prdcd.                                | "                          |                  | 5.00 "           |
| % of Recovery                                     | "                          |                  | 5.618%           |
| Hours worked                                      | "                          |                  | 24 hrs.          |
| Tons per hour                                     | "                          |                  | 3.71 tons        |
| Tons in stock                                     | 3.50 Tons<br>(Witherite)   |                  | Nil              |
|                                                   |                            |                  | 3.50 "           |

| STOCKS.                    |                   |                                                      |                  |
|----------------------------|-------------------|------------------------------------------------------|------------------|
|                            | <u>Nentsbury.</u> | <u>Rodderup.</u>                                     | <u>Wellhope.</u> |
| Crude mine ore             | Nil.              | Nil.                                                 | 2300 Tons        |
| Galena                     | 4.000 Tons        | 8.500 Tons                                           | -                |
| Witherite<br>(Hand-picked) | 3.500 "           | -                                                    | -                |
| FLUOR SPAR DUMPS           | -                 | 60,000 Tons                                          | -                |
|                            |                   | (Calculated in Middle Level Dumps,<br>Rodderup Fell) | 60,000 "         |

Note: During the month, 6.7875 tons of Hand-picked Witherite from Nentsbury, was delivered to Messrs. Athole G. Allen (Stockton) Ltd. The analysis was:-  $\text{BaCO}_3$  - 93.4%,  $\text{BaSO}_4$  - 1.1%,  $\text{SiO}_2$  - 1.6%,  $\text{ZnO}$  - 0.50%,  $\text{CaCO}_3$  - 0.91%, and  $\text{Fe}_2\text{O}_3$  and  $\text{Al}_2\text{O}_3$ , 1.66%, a total of 99.77%

| <u>Compressed Air.</u>           |                                                                                                                                                                                            |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <u>Nenthead &amp; Nentsbury.</u> | Compressed Air produced from Water Power only when required, about 350 cu.ft. per minute at a pressure of 90lbs per square inch at Nenthead, and 80 lbs per square inch in Nentsbury Mine. |
| <u>Rodderup.</u>                 | Compressed Air produced at Rodderup from Water Power only, at about 250 cu.ft. per minute at a pressure of 80lbs per square inch, and for 24 hours daily, 7 days per week.                 |

## **NENTHEAD MINES**

### **MARCH 1948**

NENTSBURY MINE. Two miners, including the foreman, were employed during the month to maintain the main level up to Wellhope Shaft and some distance further East, and to break and bring out what hand-picked Witherite ore they could. This amounted to 8.9875 tons for the month. I shall continue doing this and hope to produce a similar quantity per month, as the revenue therefrom pays the miners wages, and thus the cost of maintaining the level, and the small cost of explosives etc.

MILL. The Cumberland County Council are progressing daily with the work of restoring the water supply to Nentsbury Mill.

RODDERUP MINE. Drilling, with one rock drill only, was continued in the Flat in the 18.28 Metres Level below the Blackburn Level. 72 tons of ore were broken and brought out to the Mill, and from this and 7 tons in stock at the beginning of the month, 5.00 tons of concentrates were recovered, a recovery of 5.618% The rock in this Flat is hard, with small Veinlets, about 1 inch in width, crossing in places. The ore yield is interspersed, and after blasting, is not easy to pick. Drilling can only take place on alternate days, as only 4 men, including the foreman are employed, and after blasting one day, the ore is trammed to the Shaft the following day. Two men are required in the Blackburn Level and two men in the 18.28 metres Level, to hoist and clear the ore for the horse to draw out to the Mill. Owing to the usual Easter holiday, two working days, were lost during March.

MILL. During the month, our Engineer, F. Ridley, and Joiner, G. Ward, have been employed at Rodderup, repairing the Mill. This has meant some increase in the car hire account for the month, but the car was required to transport these skilled men to and from Rodderup frequently. The old foreman, Mr. Stephenson, has also assisted, but he is unable to work every day. The Mill required repairing urgently, and only skilled men of experience could carry out the work, which is still proceeding. A difficulty has been the inability to obtain new spare parts, and skill has been required to fashion new parts from other material, hence the need to send Ridley & Ward.

LABOUR. The position is unchanged, and, as reported in February, the Foundry and small coal mines have priority. Men are still able, of course, to leave their employment by giving a week's notice.

#### SALES.

Lead Ore. We have offered the 1/3 mm. and 3/5 mm. sizes to Pyros White Lead Co. Ltd.

Witherite. 6.7875 tons sold to Messrs. Athole E. Allen (Stockton) Ltd., who have paid £88. 4. 8. net, in respect of the first two parcels, amounting to 11.70 tons. Gravel. 55.40 tons of Gravel and Stone were sold for £11. 15. 3. net.

FLUOR SPAR DUMPS. In the Report for February, I wrote fully respecting the proposed sale of the Middle Level Fluor Spar dumps to the Imperial Smelting Corporation Ltd., through the medium of Messrs. R. S. Graham & Co., otherwise Mr. R. Graham-Seatoun, the principal of the latter firm.

The present position (April 7<sup>th</sup>) is that I.S.C. have withdrawn their offer, which they made through Mr. Graham- Seatoun, but no explanation has been offered, as yet. I have however arranged to meet Mr. L. E. Oldridge, Commercial Manager of I.S.C. and who signed the original offer, at Carlisle on April 13th, when I hope to ascertain the reason. The I.S.C. were at liberty to withdraw their offer, as it had not been formally accepted, and could not be until first we had secured the consent of Head Office to the extension of the Rodderup Mine Lease, and of the Fluor Spar Agreement, and second, until we had secured from Greenwich Hospital an assurance that these extensions would be granted. A draft Agreement had however been prepared by our Solicitors, Messrs, Blackburn & Main, and submitted to Mr. Graham for presentation to I.S.C. Mr. Graham was informed that the I.S.C. Solicitor was away and would not be available until after the Easter holiday, but on March 29th Mr. Graham telephoned the Nenthead Office that the offer had been withdrawn, which information surprised me on my return from Rodderup Mine. No time was wasted between receiving the sanction of Head Office, and the draft Agreement was posted to Mr. Graham on the day it was completed, that is March 20th.

Both Mr. Graham and myself have endeavoured to ascertain from I.S.C. the reason for the withdrawal, without obtaining any satisfaction. It first appeared that it may be due to treasury consent not being forthcoming, and this consent is required, not only for payments into the V.M. account, but, also owing to the national financial position, all capital expenditure above a certain amount also requires Treasury consent. It may be either of these points, which have caused the withdrawal, but since speaking to Mr. Oldridge and arranging for the meeting on April 13th, an announcement has appeared in the Financial Press to the effect that the I.S.C. are selling out their interests to the Zinc Corporation Ltd., which own large Zinc, Lead and Silver interests in Australia. It appears to me that this may be the reason for the withdrawal, and if so, there is a better prospect of the negotiations being resumed after the transfer has been completed, however I shall, I hope, have more definite information after my interview with Mr. Oldridge on the 13th. I have also to meet Mr. Graham at Carlisle on Wednesday, the 14th inst., at the office of Messrs. Blackburn & Main, this appointment having been made before the appointment with Mr. Oldridge, who is travelling North sooner than he anticipated.

I will report more fully after these interviews. The appointment with Mr. Graham, is largely in connection with the question of commission to be paid to him, in the event of the sale materialising, but I have always considered, and Mr. MacPhail has agreed with me, that this should be the subject of a separate agreement.

GENERAL. There is nothing to report respecting our claim in respect of damages arising from the state in which the dumps were left by N.F.M.D. The rent of £50. due for Rampgill Mill in respect of the quarter ended March 25th 1948, has not yet been paid, and our Solicitors are writing the Ministry on this matter.

## Report on the Nenthead Mines April 1948

### REPORT on the

### NENTHEAD MINES

APRIL 1948.

|                    | <u>Nentsbury.</u>         | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------|---------------------------|------------------|------------------|----------------|
| Ore Mined          | 7.925 Tons<br>(Witherite) | Occupied<br>by   | 100 Tons         | 107.925 Tons   |
| Ore Milled         | Nil                       | N.F.M.D.         | 85 "             | 85 "           |
| Lead Concs. prdcd. | "                         |                  | 6.2 "            | 6.2 "          |
| % Recovery         | -                         |                  | 7.29 %           | 7.29%          |
| Hours worked       | 7                         |                  | 21 hrs.          | 21 hrs         |
| Tons per hour      | -                         |                  | 4.05 Tons        | 4.05 Tons      |
| Tons in stock      | 5.000 Tons<br>(Witherite) |                  | 15.00 "          | 20.00 "        |

### STOCKS.

|                            | <u>Nentsbury</u>                                | <u>Rodderup</u> | <u>Wellhope</u> | <u>Totals.</u> |
|----------------------------|-------------------------------------------------|-----------------|-----------------|----------------|
| Crude Mine Ore             | Nil                                             | 15 Tons         | 2300 Tons       | 2315 Tons      |
| Galena                     | 4.000 tons                                      | 14.70 "         | -               | 18.7 "         |
| Witherite<br>(Hand-picked) | 5.000 "                                         | -               | -               | 5.00 "         |
| Fluor Spar Dumps           | -                                               | 60,000 "        | -               | 60,000 "       |
|                            | (Calculated at Middle Level<br>Dumps, Rodderup) |                 |                 |                |

Note:- During the month 6.425 tons of Hand-picked Witherite from Nentsbury was delivered to Athole G. Allen (Stockton) Ltd. The analysis was BaCO<sub>3</sub> - 94.94%, BaSO<sub>4</sub> - 0.40%, SiO<sub>2</sub> - 1.5%, CaCO<sub>3</sub> - 0.80%, Pb. - trace, Zn - Nil, FeO<sub>2</sub> & Al<sub>2</sub>O<sub>3</sub> - 1.63%, total - 99.27% )

### Compressed Air

Nenthead & Nentsbury. Compressed Air produced from Water Power only when required, about 350 cubic feet per minute at a pressure of 90 lbs per square inch at Nenthead, and about 80 lbs per square inch in Nentsbury Mine.

Rodderup. Compressed Air produced at Rodderup from Water Power only, about 250 cubic feet per minute at a pressure of 80 lbs per square inch for 24 hours daily 7 days per week.

## **NENTHEAD MINES**

### **APRIL 1948**

NENTSBURY MINE. Two miners including the foreman, were employed during the month to maintain the main level to a point approximately 450 metres East Wellhope Shaft, and to break and hand-pick from this point what Witherite ore as was possible. The quantity broken was 7.925 Tons.

MILL. The laying of the water-pipes to connect the water supply to the Mill by conveying it under the main County Road, has been completed. Early in May these pipes will be tested in the presence of representatives of the Cumberland County Council and our Engineer.

RODDERUP MINE. The Flat (see sketch) in the Eastern Flat Section, 18.28 metres below the Blackburn Level, has improved during the month. The percentage recovery was 7.29% compared with 5.618% in March. Ore crushed amounted to 85 tons compared with 82 tons in March, and concentrates recovered were 6.2 tons compared with 5 tons in March. The ore deposit improved towards the end of the month. The greatest difficulty is shortage of labour, and in this respect, we can expect little improvement.

MILL. Improvements and repairs have been made to Rodderup Mill, and more will have to be done as time permits and worn-out parts are replaced by parts made ourselves from scrap material. It is impossible to obtain new parts in England, without waiting several months.

Labour. The general position is, if anything worse. At the end of the month, the Contractor engaged to draw the ore from out of the mine to the Mill, terminated his employment. This man gave trouble for some time, and would only work when he felt inclined. He would not keep to regular hours, and seldom, if ever, worked daily.

We tried every possible means of satisfying him, including the payment of high remuneration, but it was all to no purpose.

### SALES.

Lead Ore. None has been despatched, but the British Pyros White Lead Co., Ltd., of West Drayton, to whom we offered the 1/3 and 3/5 mm. sizes, promised to obtain a permit and send us instructions for the despatch of the 10 to 12 tons of this material which we have available, in May at a price of about £70 per ton at Alston Station. The Slime Concentrates and larger size concentrates, will have to be disposed of to Messrs. Walkers Parker & Co. Ltd., Smelters of Newcastle-on-Tyne, and sold on a formula which will give about £50 perPb. content than the 1/3 and 3/5 mm. ore for Pyros, but not so low as to justify the considerable difference in price.

Witherite. During the month, 6.425 tons of hand-picked Witherite was sold to Messrs. Athole G. Allen (Stockton) Ltd, for £7. 10. 7. per ton nett.

Gravel & Stones. A total of 107.5 tons of Gravel & Stones was sold during the month. Stones amounted to 75 tons and were sold for 2s/6d per ton on site.



Gravel amounted to 32.5 tons, and this was sold for 5s/- and 5s/6d per ton on site. The nett amount received was £17. 13s. 3d.

FLUOR SPAR DUMPS. There is unfortunately little to add to what I have previously reported by letter and Weekly Reports, etc., in regard to the negotiations for the sale of the Middle Level Fluor Spar Lumps. As intimated I met Mr. L. E. Oldridge, Commercial Manager of Imperial Smelting Corporation Ltd., at Carlisle on April 13th, when, after some discussion and after he had briefly examined the draft Agreement prepared by Messrs. Blackburn & Main, he stated that he would have the position re-considered, on his return to London, and write us again. He was going, to request Mr. Graham-Seatoun to forward him the two copies of the draft Agreement, which Messrs, Blackburn & Main had sent to Mr. Graham-Seatoun on March 20th 1948, but which Mr. Graham-Seatoun had not presented to I.S.C. as their solicitor had not been available when he tried to make an appointment. Mr. Oldridge stated that the material, as indicated by the samples drawn from the middle Level heaps, was satisfactory for their purposes, and in view of the fact that the draft Agreement provided for a much later date for the removal to be completed, than we had originally stipulated, he felt that the matter could be re-considered. We have not heard anything further from either I.S.C. or Mr. Graham-Seatoun since that date, although we have written the latter. I had, at Mr. Graham-Seatoun's request, arranged to meet him at Carlisle on the 14th instant, with Mr. MacPhail, of Messrs, Blackburn & Main present at the interview, but on the 10th instant, Mr. Graham telegraphed cancelling the appointment, since when we have not heard further from him.

A decision may be being delayed until negotiations between the Zinc Corporation and the I.S.C. are completed, whereby the former purchases the latter Company's interests and holdings. In this connection, it was reported in "The Daily Telegraph" on May 6th 1948, that holders of over 90% of the I.S.C. capital had accepted the offer recently made by the Zinc Corporation. The offer had therefore become unconditional, but the Zinc Corporation has extended the time limit for the remaining 10%, to May 31<sup>st</sup>.

The only other point in connection with the negotiations, is that on Friday, the 7th May, Mr. MacPhail handed me a letter, as per copy enclosed, in which Messrs, Blackburn & Main have their considered opinion that the Fluor Spar dumps at Firestone, Nenthead, among others, are the actual property of the V.M. Company, according to the documents given to them to study. Mr. MacPhail advised me verbally that before any royalty on the minerals produced from the dumps is paid to Greenwich Hospital, the G.H should be made to prove that they are entitled to such Royalty. However, this aspect, has been rather prejudiced in the past, by the fact that up to about the end of 1934, the V.M. Co. did pay certain Royalties to G.H. in respect of the dumps at Nenthead, which they purchased from the old Tynedale Company.

#### GENERAL.

Nothing further has transpired in regard to our claim in respect of the damages arising from the dumps released from the requisitioning order, nor has the rent

of £50 in respect of the quarter's rent for Rampgill Mill, due on March 25th, been paid yet.

## Report on the Nenthead Mines May 1948

### REPORT on the NENTHEAD MINES MAY 1948

|                    | <u>Nentsbury.</u>        | <u>Rampall.</u>         | <u>Rodderup.</u>      | <u>Totals.</u> |
|--------------------|--------------------------|-------------------------|-----------------------|----------------|
| Ore mined          | 6.55 Tons<br>(Witherite) | Occupied<br>by N.F.M.D. | 70 Tons<br>(Lead Ore) | 70 Tons        |
| Ore Milled         | Nil                      |                         | 78 Tons               | 78 "           |
| Lead Concs. prdcd. | "                        |                         | 5.75 "                | 5.75 "         |
| % Recovery         | "                        |                         | 7.37%                 | 7.37%          |
| Hours worked       | "                        |                         | 19 hours              | 19 hours       |
| Tons per hour      | "                        |                         | 4.10 Tons             | 4.10 Tons      |
| Tons in stock      | 5.20 Tons<br>(Witherite) |                         | 7 "                   | 7 "            |

#### STOCKS.

|                            | <u>Nentsbury.</u> | <u>Rodderup.</u>                          | <u>Wellhope.</u> | <u>Totals.</u> |
|----------------------------|-------------------|-------------------------------------------|------------------|----------------|
| Crude mine ore             | Nil.              | 7 tons                                    | 2300 tons        | 2307 tons      |
| Galena                     | 2.00 Tons         | 14.822 tons                               | Nil              | 16.822 "       |
| Witherite<br>(Hand-picked) | 5.25 "            | Nil                                       | Nil              | 5.250 "        |
| Fluor Spar dumps           | Nil               | 60,000 "<br>(Middle Level)<br>(Estimated) | Nil.             | 60,000 "       |

NOTE: During the month, 6.30 tons of hand-picked Witherite was sold to Messrs. Athole G. Allen (Stockton) Ltd., the analysis being:- BaCO<sub>3</sub> - 93.4%, BaSO<sub>4</sub> - 1.30%, SiO<sub>2</sub> - 1.8%, Fe<sub>2</sub>O<sub>3</sub> & Al<sub>2</sub>O<sub>3</sub> - 2.1%, CaCO<sub>3</sub> - 0.75%, Total - 99.35% Lead Concentrates sold to Walkers Parker & Co. Ltd., Newcastle, were 7.628 tons dry weight. The agreed analysis was:- Lead - 81.89%, Silver - 3.08 ozs per ton, Zinc - a trace only. A permit has been received from Pyros White Lead Co. Ltd., West Drayton, for 12 tons of Lead Ore to be despatched early in June (this was despatched on June 3rd the dry weight being 12.385 tons). The weight will be deducted in June report.

#### COMPRESSED AIR

Nenthead & Nentsbury. Compressed Air produced from Water Power only, when required, about 300 cubic feet per minute at a pressure of 90lbs per square inch at Nenthead, and about 80 lbs per square inch in the mine.

Rodderup. Compressed Air produced from Water Power only, about 250 ~~xxx~~ cubic feet per minute at a pressure of 80 lbs per square inch for 24 hours daily 7 days per week.

## **NENTHEAD MINES**

### **MAY 1948**

NENTSBURY MINE. Two miners, including the foreman, were employed during the month to maintain the main level to a point approximately 450 metres East of Wellhope shaft, and to break and hand-pick such Witherite ore as was possible.

The quantity broken was 6.55 tons.

MILL. The laying of the Water-pipes under the road to connect the water supply to Nentsbury Mill, was tested and proved satisfactory. Included in May expenditure is the sum of £162, as agreed previously with the County Council for the V.M. share of the work. This sum was received in 1947 as part of the compensation for the damage caused when the aqueduct, was destroyed.

RODDERUP MINE. During the month 70 tons of ore was picked from rock broken in the Flat, and sent to the Mill to be crushed with 8 tons taken from stock, making 78 tons in all. Concentrates produced amounted to 5.75 tons, the percentage recovery being 7.37%. The lower quantity of ore broken, was the result of 2 less miners being employed. These two men left us for no apparent reason other to have a change of occupation. The ore in the Flat has been disturbed by a wide cross fissure, which not only threw the strata but also let down a quantity of water. The ore at the end of the month was not as rich as in the early part of the month.

MILL. We have so far managed to crush and dress all the ore sent to the Mill, but more repairs will have to be done when time permits.

LABOUR. The haulage Contractor left us at the end of April, and we were compelled to buy a horse to draw the ore from the mine. Fortunately, we secured a suitable horse, 5 years old, for £49 and so far it has given every satisfaction, the cost of the horse was less than two months' pay to the Contractor, but we have of course, to feed the horse and supply a driver when using it in the mine. The man who drives the horse is employed in the mine when the horse is not required.

### SALES.

Lead Ore. Lead Ore sold to Walkers Parker & Co. Ltd. Newcastle, was 7.628 tons dry weight, (See Page 1 for analysis). The price per ton obtained, after allowing for carriage, is about £58. (The price we expect to get from the British Pyros white Lead Co. for the 12.385 tons despatched June 2nd, should be about £70 per ton, after allowing for transport).

Witherite. During the month, 6.30 tons was sold to Athole G. Allen (Stockton) Ltd., as per analysis on Page 1. The price per ton is £7. 8. 10.

Gravel sold amounted to 96.25 tons, at a profit of £29. 10. 0. Included in this was a parcel of 40 tons, sold for 7s/- Per ton, against the usual price of 5s/- to 5s/6d per ton.

FLUOR SPAR DUMPS. Developments in connection with the negotiations with Imperial Limiting Corporation Ltd. re: the sale of the Middle Level Fluor Spar Dumps, have been reported to Head Office as they occurred and copies of the correspondence between ourselves, Messrs. Blackburn & Main, the I.S.C. (through their Commercial Manager, Mr. Oldridge and their Solicitor, Mr. Delafield), and Mr. Graham-Seatoun have been forwarded. Briefly, the position is that I.S.C. have not yet made any further decision and their Solicitor is holding the copies of the draft Agreement prepared by Messrs. Blackburn & Main, until the matter is re-considered by I.S.C. With regard to Mr. Graham Seatoun, our Solicitors have written him withdrawing any authority to negotiate the sale of any material owned by the V.M. Mine Co., as we were not satisfied with, his conduct. If the sale of the Fluor Spar Dumps to I.S.C. does eventuate, we shall have commission to pay Graham-Seatoun as he was instrumental in interesting the I.S.C., and Messrs. Blackburn & Main have informed him of this in their letter.

Meantime, a Mr. Maddison, of Stanhope, Co. Durham, is interested in the dumps, and is prepared to pay 15s/- per ton on site for the material and considers he could treat the whole of the estimated 60.000 tons in 3½ years. With the recent extensions of the Rodderup Lease and the Fluor Spar Agreement, we have 4½ years to dispose of the dumps. I would prefer to deal with the I.S.C. if it should be possible, as they are an established firm of repute, and also, I anticipate that Mr. Maddison will wish to treat the material on site which may involve some complications, which would have to be provided for in any Agreement with Mr. Maddison, in regard to surface damages and pollution of the river, depending largely upon the method of treatment he uses.

I shall discuss this new interest, with Mr. MacPhail, the senior partner of Messrs. Blackburn & Main, when he returns from vacation about the 15th June. Before we can proceed at all with any negotiations with Maddison, we shall have to have a final decision from I.S.C., and if we have not received this then, I shall ask Mr. MacPhail to write them pressing for a decision in view of this new development.

GENERAL. We have heard nothing further regarding our claim for compensation arising from the state in which the requisitioned dumps were left by N.F.M.D., but in regard to the rent for Rampgill Mill, overdue from March 25th 1948, Mr. MacPhail informed me that he had received a Bank Order from the Ministry of Supply, but unfortunately this had been drawn up wrongly and had to be returned. We may receive the proper payment soon.

## Report on the Nenthead Mines June 1948

### REPORT

\*\*\*\*\*

on the

### NENTHEAD MINES

\*\*\*\*\*

JUNE 1948

\*\*\*\*\*

|                    | <u>Nentsbury.</u>         | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------|---------------------------|------------------|------------------|----------------|
| Ore mined          | 8.125 Tons<br>(Witherite) | Occupied<br>by   | 16 tons          | 16 tons        |
| Ore milled         | Nil.                      | N.F.M.D.         | 23 "             | 23 "           |
| Lead Concs. pred.  | "                         |                  | 1.8 "            | 1.8 "          |
| % Recovery         | "                         |                  | 7.82%            | 7.82%          |
| Hrs worked in mill | "                         |                  | 6 hrs            | 6 hrs          |
| Tons per hour      | "                         |                  | 3.83 tons        | 3.83 tons      |
| Tons in stock      | "                         |                  | Nil.             | Nil.           |

### STOCKS.

|                                     | <u>Nentsbury.</u>                                                                   | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|-------------------------------------|-------------------------------------------------------------------------------------|------------------|------------------|----------------|
| Crude mine-ore                      | Nil                                                                                 | Nil              | 2,300 tons       | 2,300 tons.    |
| Galena                              | Nil                                                                                 | 6.237 Tons       | Nil              | 6.237 "        |
| Witherite                           | Nil.                                                                                | Nil.             | Nil.             | Nil.           |
| Fluor Spar (as estimated by I.S.C.) | 60,000 tons at Rodderup, and 15,000 tons at Firestone, Nenthead, total: 75,000 tons |                  |                  |                |

Note:- During June, 13.375 tons Witherite was sold to Messrs. Athole G. Allen (Stockton) Ltd. The analysis of the first parcel, which weighed 6.55 tons, was 90.9% BaCO<sub>3</sub>, 1.57% BaSO<sub>4</sub>, 2.47% SiO<sub>2</sub>, trace Pb, 1.06% ZnS, 1.45% Fe<sub>2</sub>O<sub>3</sub> & Al<sub>2</sub>O<sub>3</sub>, 0.8% CaCO<sub>3</sub>, Total - 98.197% The second parcel, weighing 6.825 tons, assayed 92.41% BaCO<sub>3</sub>, 1.89% BaSO<sub>4</sub>, 2.72% SiO<sub>2</sub>, 1.80% Fe<sub>2</sub>O<sub>3</sub> & Al<sub>2</sub>O<sub>3</sub>, 0.51% CaCO<sub>3</sub>, trace PbS, 0.40% ZnS, total - 99.73%

Lead Ore, 12.385 tons of Lead Concentrates was sold to British Pyros White Lead Co.Ltd. who accept any percentage above 83% Pb., at a price of £70. 7. 7d. f.o.r. Alston Station.

### COMPRESSED AIR

Nenthead & Nentsbury. Compressed Air produced from Water Power only, when required, about 300 cubic feet per minute at a pressure of 90 lbs per square inch at Nenthead and about 80 lbs per square inch in Nentsbury Mine.

Rodderup. Compressed Air produced from Water Power only, about 250 ~~xxxxxxxxxxxxxxxx~~ cubic feet per minute at a pressure of about 80 lbs per square inch for 24 hours daily 7 days per week.

## **NENTHEAD MINES**

### **JUNE 1948**

NENTSBURY MINE. Two miners, including the foreman, maintained the main level and produced 8.125 tons of hand-picked Witherite.

MILL. The water supply is now in order, except that a part of the watercourse on the hill side has to be repaired when labour and materials are available. This is not a serious matter.

RODDERUP MINE. During the month only 16 tons of ore was mined, and 23 tons crushed for a recovery of 1.80 tons of Lead Concentrates. The difficulty has been that we have had to stagger the workmen's holidays, to keep a maintenance crew of two or three men on the mine and watercourses all the time. The ore was disturbed by a cross fissure which for a time cut out the Lead content. Towards the end of the month we opened out another Flat to avoid water trouble. This Flat is encouraging.

MILL. All the ore mined, plus the stock, was crushed. The mill is in fair order.

LABOUR. No improvement.

#### SALES.

Lead Concentrates. 12.585 tons were sold to British Pyros White Lead Co. Ltd on a previous average Lead content of 82-83% Pb. The price paid was £70. 7. 7d. per ton f.o.r. Alston Station, and we have received payment. Messrs. Walkers Parker & Co. for a parcel delivered to them in May and which assayed 81.89% Pb and 3.08 ozs Silver, only paid approximately £58. per ton f.o.r. Alston, for ore which was only very slightly lower in grade, and included all sizes of product.

Witherite. During June we sold and delivered 13.375 tons of Witherite to A. G. Allen (Stockton) Ltd., as per particulars on page 1. The average price received was about £7. 5s. 0. per ton at Nentsbury Mine.

Gravel. During the month 40.50 tons were sold for a profit of £10. 2. 6d.

FLUOR SPAR DUMPS. I can add nothing to this report, other than what is known and already sent to Head Office in my Weekly Reports and other correspondence. Contact was made with I.S.C. and negotiations with that Company are proceeding. Many of their official experts generally visited the works and mines on different occasions, and were given all the information they required.

GENERAL. I regret that this report is late, but during July, I have been engaged part and sometimes all of each day, with I.S.C. representatives and have visited London for general discussions, Carlisle for discussions with our Solicitors, and Newcastle for discussions with the I.S.C. Accountant and our Auditors. I have therefore had no time to write this report. Frequently the days meant, with travelling, upwards of 10 to 12 hours.

## Report on the Nenthead Mines July 1948

### REPORT \*\*\*\*\*

on the

### NENTHEAD MINES \*\*\*\*\*

JULY 1948  
\*\*\*\*\*

|                      | <u>Nentsbury.</u>        | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|----------------------|--------------------------|------------------|------------------|----------------|
| Ore mined            | 4.00 Tons<br>(Witherite) | Occupied<br>by   | 61 Tons          | 61 Tons        |
| Ore milled           | Nil                      | N.F.M.D.         | 61 "             | 61 "           |
| Lead Concs. prdcd.   | "                        |                  | 4.713 "          | 4.713 "        |
| % Recovery           | "                        |                  | 7.728%           | 7.728%         |
| Hours worked in mill | "                        |                  | 16 hrs           | 16 hrs         |
| Tons per hour        | "                        |                  | 3.81 Tons        | 3.81 Tons      |
| Tons in Stock        | "                        |                  | Nil              | Nil.           |

### STOCKS.

|                | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|----------------|-------------------|------------------|------------------|----------------|
| Crude Mine-ore | Nil               | Nil              | 2,300 Tons       | 2,300 Tons     |
| Galena         | "                 | 2.072 Tons       | Nil              | 2.072 "        |
| Witherite      | 4.00 Tons         | Nil              | "                | 4.000 "        |

Fluor Spar (as 60,000 tons at Rodderup, and 15,000 Tons estimated by I.S.C.) at Firestone, Nenthead, Total: 75,000 Tons.

Note: No Witherite was despatched during July. Lead Ore despatched to British Pyros White Lead Co., Ltd., weighed 8.878 tons, dry. This ore, produced mostly in June was bought by the Pyros Co. pending a Purchase Licence being issued by the Non-Ferrous Metal Control. The value per ton will be about £70 f.o.r. Alston Statipn

### COMPRESSED AIR

Nenthead & Nentsbury. Compressed Air produced from Water Power only when required, about 300 cubic feet per minute at a pressure of 90 lbs per square inch at Nenthead and about 80 lbs per square inch in Nentsbury Mine.

Rodderup. Compressed Air produced from Water Power only, about 250 cubic feet per minute, at a pressure of approximately 80 lbs per square inch in the mine for 24 hours per day, 7 days per week.



## **NENTHEAD MINES JULY 1948**

NENTSBURY MINE. The main level has been maintained over 400 metres East of Wellhope Shaft, where the foreman and one miner have broken Witherite. During the month of July, which included one week's holiday, the miners produced 4 tons of hand-picked Witherite.

MILL. The mill has not been operated but with cleaning and a few minor repairs could be put into operation in a short time.

RODDERUP MINE. During the month 61 tons of ore was mined and crushed for a recovery of 4.718 tons of Lead Concentrates. The recovery value was 7.728%. The ore in the Flat is of the value recovered.

MILL. In fair order.

### SALES.

Lead Ore. 8.878 tons sold to British Pyros White Lead Co., Ltd., West Drayton. The value should be about £70. per ton F.O.R. Alston.

Witherite. None sold

Gravel. 27.725 tons sold during the month, the value being £5. 7. 1.

FLUOR SPAR DUMPS & SALE OF ASSETS. I can add nothing to what has already been sent to Head Office in Weekly Reports and correspondence. I.S.C. officials visit Nenthead almost daily and the main part of my time is occupied with them.

GENERAL. On July 31st, a terrific thunderstorm broke over Alston & Rodderup area, and the torrent of rain which fell in a short time, was so heavy, that the main road leading to the Mill at Rodderup, was washed away, at least three bridges broken, and one length, of about 15 metres, of the aqueduct to the Hydro-Compressor, was broken down. Repairs were put in hand on August 3rd, as August 2<sup>nd</sup> was a Bank Holiday and the men would have had to have been paid double wages for working on that day. As nothing was taking harm it was not a wise policy to do so. It will take all our employees at Rodderup from two to three weeks to repair the damage.

## Report on the Nenthead Mines August 1948

### REPORT

\*\*\*\*\*

on the

NENTHEAD MINES  
\*\*\*\*\*

AUGUST 1948  
\*\*\*\*\*

---

|                      | <u>Nentsbury.</u>        | <u>Rampgill.</u> | <u>Rodderup.</u> | <u>Totals.</u> |
|----------------------|--------------------------|------------------|------------------|----------------|
| Ore mined            | 2.25 Tons<br>(Witherite) | Occupied<br>by   | 20 Tons          | 20 Tons        |
| Ore milled           | Nil                      | N.F.M.D.         | 20 "             | 20 "           |
| Lead Concs. prdcd.   | "                        |                  | 0.5 "            | 0.5 "          |
| % Recovery           | "                        |                  | 2.5%             | 2.5%           |
| Hours worked in mill | "                        |                  | 5 hrs.           | 5 hrs.         |
| Tons per hour        | "                        |                  | 4 Tons           | 4 Tons         |
| Tons in stock        | "                        |                  | Nil              | Nil.           |

---

### STOCKS.

|                | <u>Nentsbury.</u>                                                                                                                                                    | <u>Rodderup.</u> | <u>Wellhope</u> | <u>Totals.</u> |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|----------------|
| Crude mine-ore | Nil                                                                                                                                                                  | Nil              | 2,300 Tons      | 2,300 Tons     |
| Galena         | "                                                                                                                                                                    | 2.572 Tons       | Nil             | 2.572 "        |
| Witherite      | "                                                                                                                                                                    | Nil              | Nil             | Nil.           |
| Fluor Spar     | Nothing produced or sold. Heaps estimated by I.S.C. to contain 60,000 tons at Middle Level Rodderup, and 15,000 tons at Firestone, Nenthead.<br>Total:- 75,000 tons. |                  |                 |                |

Note: No Witherite has been produced since mid-August, when 6.25 tons (July stock, 4.00 tons plus August production 2.25 tons) was despatched to Messrs. Athole G. Allen Ltd Stockton. The analysis of this parcel was:- BaCO<sub>3</sub> - 92.48%, BaSO<sub>4</sub> - 2.20%, SiO<sub>2</sub> - 2.17%, PbS - 0.22%, Fe<sub>2</sub>O<sub>3</sub> and Al<sub>2</sub>O<sub>3</sub> - 2.34%, ZnS - 0.54%, CaCO<sub>3</sub> - Trace, Total - 99.95%

### COMPRESSED AIR.

#### Nenthead & Nentsbury.

Compressed Air produced up to August 12th, about 300 cubic feet per minute at a pressure of 90 lbs per square inch at Nenthead, and 80 lbs per square inch in Nentsbury Mine, from Water Power. None produced since August 12th.

#### Rodderup

Compressed Air produced by Water Power only, about 250 cubic feet per minute, at a pressure of approximately 80 lbs per square inch in the mine for 24 hours daily, 7 days per week. The Compressed Air is used for pumping purposes only.

---

## **NENTHEAD MINES**

### **AUGUST 1948**

NENTSBURY MINE. The main level has been maintained to over 400 metres East of Wellhope Shaft, and the old level from Nentsbury to Brownley Hill cleared and made accessible. No production of Witherite has been made since we fulfilled our contract with Messrs. Athole G. Allen (Stockton) Ltd., and since Head Office instructed us not to produce anything until I.S.C. agreed for us to do so or not.

MILL. The Mill has not been operated.

RODDERUP MINE. Only a few tons of ore was broken in the mine in the early part of the month and this ore was of low grade, being the cleaning up of what was left in the Flat in East End Shaft. Production which has been small for a long time, was stopped for the same reason as applies to Nentsbury. The East End Shaft is kept open, and the water kept down to several metres below the Flat where work was processing. A fall has occurred in the Blackburn Level, near where the big "fall" occurred last year. Water flowing down the level is now filling up the workings below the level. When filled this water will flow out in the Blackburn Level. It is a pity this has occurred, but it should be possible to repair the level and get to the West End Shaft where Compressed Air Blowers are fixed and pump out the water, when this area may be considered worthy of further prospection.

MILL. In fair condition.

#### SALES.

Lead Ore. None sold. The parcel sent to the British Pyros Co. Ltd. apparently included a high percentage of very fine ore, unsuitable for their furnace. The matter is being dealt with at present.

It seems likely that the ore which we sold in good faith as being from 1 to 5mm. in size, either crumbled in transit or by some unknown means contained some fine ore. We are negotiating with Pyros to sell the fine ore for us, they paying us in full for the weight of the ore above 1 mm. size and passing on to us what they can obtain for the ore of less than 1 mm., which will probably be sold at a lower price.

Witherite. All our stock (6.25 tons) was sold to Athole G. Allen Ltd.

Gravel Only 20.50 tons sold, realising a profit of £5. 2s 6d nett.

FLUOR SPAR DUMPS. Nothing to report re: these.

GENERAL. Repairs to bridges and water-courses at Rodderup have been carried out. I.S.C. officials have inspected the machinery at Wellhope Shaft, Brewery Shaft, Nenthead, Middlecleugh and elsewhere, and also in the mine at Rodderup. They have informed me they have the installations to be as reported by us.

# Report on the Nenthead Mines September 1948

## REPORT ON THE

NENTHEAD

oooooooooooooooo

MINES

oooooooooooo

SEPTEMBER,

oooooooooooooooo

1948

ooooooo

|                          | <u>Nentsbury.</u> | <u>Rampgill.</u>  | <u>Rodderup.</u> | <u>Totals.</u> |
|--------------------------|-------------------|-------------------|------------------|----------------|
| Ore mined                | Nil               | Derequisitioned   | Nil              | Nil            |
| Ore Milled               | "                 | by N.F.M.D. 13th  | "                | "              |
| Lead Concentrates prdcd. | "                 | Sept. 1948. Not-  | "                | "              |
| % Recovery               | "                 | ice received 15th | "                | "              |
| Hours worked in Mill     | "                 | Sept. 1948.       | "                | "              |
| Tons per hour            | "                 |                   | "                | "              |
| Tons in stock            | "                 |                   | "                | "              |

## STOCKS.

|                | <u>Nentsbury.</u>                                                                                                                                                     | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------|----------------|
| Crude Mine-ore | Nil.                                                                                                                                                                  | Nil              | 2,300 Tons       | 2,300 Tons     |
| Galena         | Nil.                                                                                                                                                                  | 2,572 Tons       | Nil              | 2,572 "        |
| Witherite      | Nil.                                                                                                                                                                  | Nil              | Nil              | Nil            |
| Fluor Spar     | The Fluor Spar heaps are as reported last month, viz: 75,000 tons estimated by I.S.C., 60,000 Tons at Middle Level, Rodderup, and 15,000 Tons at Firestone, Nenthead. |                  |                  |                |

Note:- No Witherite produced.

## COMPRESSED AIR.

Nenthead &  
Nentsbury.

None produced during the month.

Rodderup.

Compressed Air produced by Water Power only, about 250 cu.ft. per minute at a pressure of approximately 80lbs per square inch in the mine, for 24 hours daily, seven days per week. The Compressed Air is used for pumping purposes only.

## **NENTHEAD MINES SEPTEMBER 1948**

NENTSBURY MINE. The main level has been maintained to over 400 metres East of Wellhope Shaft. The second road out of Nentsbury, by using the level from Nentsbury to Brownley Hill, is kept in repair. Both levels have been inspected during the month by H.M. Inspector of Mines, who found no fault. No Witherite was produced. The miners have been helping to clean and paint the Nenthead Offices, which were dirty.

MILL. Idle.

RODDERUP MINE. No ore was broken in the mine. The mine is inspected on alternate days. The water is kept below the 18.28 metres Level in the East End Shafts, where mining was last carried on in the Flats.

The miners (3) and the Foreman are employed on work underground and outside on roads and watercourses. The Mill men are similarly employed. We are keeping these employees occupied until I.S.C. take over when negotiations are concluded.

MILL. In fair condition.

### SALES.

No Lead Ore sold. The parcel sent to British Pyros White Lead Co. Ltd., and which they claimed contained some Slime Lead Ore was paid for after prolonged correspondence. To settle the matter and obtain payment, we agreed to allow the firm £50 which they accepted.

Witherite. Messrs. Athole G. Allen (Stockton) Ltd., have paid for all Witherite supplied to them.

FLUOR SPAR DUMPS. Nothing to report re: these.

GENERAL. As reported above, N.F.M.D. have given notice to derequisition Rampgill Mill as and from the 13th September. The rent due to date has been paid.

The draft agreement, prepared by Messrs. Blackburn & Main, was completed about the 15th Sept., and copies were sent to Head Office and to Mr. Delafield, the I.S.C. Solicitor. On October 6th, I am meeting Mr. Oldridge and Mr. Delafield in Newcastle and shall take them to meet Mr. Hamilton-Russell, the Mineral Agent for Greenwich Hospital Estates, and, in the afternoon, to meet Mr. John Balden, Lord Allendale's agent. Possibly, when both these gentlemen are in the district, they may call and see Mr. MacPhail of Messrs. Blackburn & Main. Representatives of Gerald Eve & Co., Chartered surveyors, who are preparing a claim for compensation in respect of Rampgill Mill, have visited and inspected the building, and are coming again.

## Report on the Nenthead Mines October 1948

# REPORT

0000000000

on the

NENTHEAD MINES

000000000000 0000000000

OCTOBER

000000000000

1948

000000

|                      | <u>Nentsbury.</u> | <u>Rampgill.</u> | <u>Rodderup</u> | <u>Totals.</u> |
|----------------------|-------------------|------------------|-----------------|----------------|
| Ore Mined            | Nil.              | Now in V.M.      | Nil.            | Nil.           |
| Ore Milled           | "                 | ownership        | "               | "              |
| Lead Concs. prdcd.   | "                 | pending a        | "               | "              |
| % Recovery           | "                 | settlement       | "               | "              |
| Hours worked in Mill | "                 | with Anglo-      | "               | "              |
| Tons per hour        | "                 | Austral Mines    | "               | "              |
| Tons in stock        | "                 | Limited.         | "               | "              |

## STOCKS.

|                | <u>Nentsbury.</u> | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|----------------|-------------------|------------------|------------------|----------------|
| Crude Mine ore | Nil.              | Nil.             | 2,300 tons       | 2,300 Tons     |
| Galena         | "                 | 2.572 Tons       | Nil              | 2.572 "        |
| Witherite      | "                 | Nil              | "                | Nil            |

Fluor Spar      The Fluor Spar dumps are as reported last month viz: 75,000 Tons estimated by I.S.C., 60,000 tons at Middle Level, Rodderup, and 15,000 tons at Firestone Nenthead.

Note: No Witherite produced or sold.

## Compressed Air.

Nenthead & Nentsbury.      Only very occasionally was Compressed Air produced, by water power, mainly to test the pipes and give some ventilation in certain parts of Nentsbury Mine, and to test rock drills.

Rodderup      Compressed Air produced from Water Power only, about 250 cubic feet per minute at a pressure of approximately 80 lbs per square inch in the mine for 24 hours daily, seven days per week. The Compressed Air is used for pumping purposes only.

## **NENTHEAD MINES OCTOBER 1948**

NENTSBURY MINE. The main level has been maintained and is accessible for at least, 400 metres East of Wellhope Shaft. Beyond that point, the level cannot be inspected, as all pipes for ventilation purposes have decayed and mostly fallen to the ground. The impure air makes it impossible to go East beyond the 400 metres point.

MILL. Idle.

RODDERUP MINE. Acting on Head Office instructions no ore has been mined. The mine is inspected frequently and the water is kept below the 18.28 metres Level in the East End Shafts. The foreman and the miners have repaired the main level near the East End Shafts. The Mill men, now two in number, have been employed on water-courses etc.

MILL. In fair condition.

### SALES.

Lead Ore. None sold.

Witherite None produced or sold.

Gravel. None sold.

FLUOR SPAR DUMPS. Nothing to report.

GENERAL. On October 6th, Messrs. Oldridge and Delafield came to Newcastle, where I met them by arrangement and took them to see the Greenwich Hospital representative (Mr. E. C. Hamilton-Russell), before lunch. After lunch, I motored them to Stocksfield where we met Mr. Balden, Lord Allendale's agent, Mr. Daniell, Mining Engineer for Lord Allendale, and a representative of Messrs. Dees & Thompson, Lord Allendale's solicitors. The meetings were friendly. A full report of these meetings were sent to Head Office on October 7th. Much time has been given to completing the transfer of the V.M. assets to Anglo-Austral Mines Ltd. as soon as possible, but several points have arisen which required agreement of both the Anglo-Austral and the V.M. This refers particularly to the new Town & Country Planning Act, with which we have been dealing. I have no doubt that this matter will be settled satisfactorily to all concerned. We have made the necessary applications within the specified time. In the meantime, we have to prepare plans for the area circumscribed in each lease, and have to present 4 copies of each of the plans referring to each lease.

Copy.

BLACKBURN & MAIN  
Solicitors

35, Lonsdale Street  
CARLISLE  
7<sup>th</sup> May 1948

A. Treloar, Esq.,  
Vieille Montagne Zinc Co.,  
NENTHEAD  
By Alston  
CUMBERLAND

Dear Mr. Treloar,

Firestone Mine Heaps.

As requested we have perused the copy Agreement of the 13th January 1896 made between the Nenthead & Tynedale Lead & Zinc Company of the one part and the Vieille Montagne Zinc Company of the other part, and also the copy Assignment of the 30th June 1896 made between the same parties and in the same order, the latter document being the deed prepared for the purpose of carrying into effect the terms of the agreement of the 13th January 1896 so far as regarded the leasehold premises agreed to be sold. As before stated the documents we have perused are only copies, but we assume that they correctly set out the facts.

The Agreement of 13th January 1896 was an agreement on the part of the Tynedale Lead & Zinc Company to grant to the Vieille Montagne Zinc Company a licence or concession to work all mines and minerals under property known as Priorsdale, and a lease for 42 years of certain premises at Nenthead, and to sell to the Vieille Montagne Zinc Company certain leasehold property at Nenthead, for the residue of the Leasehold terms for which the same were held, and the whole of the Vendors interests in the mines and mining rights specified in the leases and concessions therein set out and "the whole of the engines, boilers, plant 'machinery' "implements, tools and like effects both fixed and unfixed in or about the leasehold premises (therein specified) and all rights '(if any) vested in the Vendors to use any water or water rights in connection with such premises and also all waste or spoil heaps consisting of debris of former mining or ore dressing operations and the whole of the plant machinery etc. in or about the lands at Nenthead therein mentioned."

The considerations for the therein mentioned Leases Licences and consents and for the leasehold premises, mines mining rights, engines and other plant and waste heaps, was stated to be the sum of £30,000, of which purchase price the sum of £30,000 was to be taken to be the value of the engines, boilers, plant, machinery, implements, tools and like effects waste or spoil heaps, goods, chattels and other effects capable of manual delivery. The Agreement also provided for the payment of certain royalties by the Vieille Montagne Zinc Company to the Vendors.

As before stated the Assignment of the 30th June 1896 is the assignment to the Vieille Montagne Zinc Company of the leasehold properties referred to in the



agreement for sale, and the consideration therein expressed to be paid by the Vieille Montagne Zinc Company is £10,000, this being the balance of the purchase price of £30,000 referred to in the Agreement for sale. The terms for which the leasehold properties were held were for the unexpired residues of certain terms 1000 years from the year 1621 and for the residue of a term of 800 from the 11th November 1785. The mine heaps are not mentioned in this Assignment, the reason being that they formed part of the property which was capable of passing by delivery.

The greater part of the land comprised in this deed was assigned to the Vieille Montagne Zinc Company for the residues of the terms for which the same was held, but other portions were expressed to be assigned to the Company absolutely. We do not quite understand why this should be, but in any event, we not see that the question of the tenure of the property affects the ownership of the dumps. As to whether the dumps on the premises are the same dumps as those which were expressed to be bought from the Tynedale Lead Zinc or whether they represent these dumps and further accumulations does not, in our opinion, matter. We are definitely of the opinion that the dumps on the property belong to the Vieille Montagne Zinc Company, but they may be liable to pay royalties in respect of the same.

We return the two copy documents you handed to us.

Yours faithfully

BLACKBURN & MAIN

# Report on the Nenthead Mines November 1948

## R E P O R T

@@@@@@@@@@@@

on the

N E N T H E A D M I N E S

@@@@@@@@@@@@@@@@ @@@@@@@@@@@@@

N O V E M B E R 1 9 4 8

@@@@@@@@@@@@@@@@ @@@@@@@@@

|                      | <u>Nentsbury.</u> | <u>Rampgill.</u>        | <u>Rodderup.</u> | <u>Totals.</u> |
|----------------------|-------------------|-------------------------|------------------|----------------|
| Ore mined            | Nil               | Now in V.M. possession, | Nil              | Nil            |
| Ore milled           | "                 | pending a settlement    | "                | "              |
| Lead Concentrates    | "                 | with Anglo Austral      | "                | "              |
| % Recovery           | "                 | Mines Ltd & I.S.C.      | "                | "              |
| Hours worked in Mill | "                 |                         | "                | "              |
| Tons per hour        | "                 |                         | "                | "              |
| Tons in stock        | "                 |                         | "                | "              |

## STOCKS.

|                | <u>Nentsbury.</u>                                                                   | <u>Rodderup.</u> | <u>Wellhope.</u> | <u>Totals.</u> |
|----------------|-------------------------------------------------------------------------------------|------------------|------------------|----------------|
| Crude mine-ore | Nil                                                                                 | Nil              | 2300 tons        | 2300 tons      |
| Galena         | Nil                                                                                 | 2.572 Tons       | Nil              | 2.572 "        |
| Witherite      | Nil                                                                                 | Nil              | Nil              | Nil            |
| Fluor Spar     | Fluor Spar dumps as reported last month, estimated to amount in all to 75,000 tons. |                  |                  |                |

Note: No Witherite produced or sold

## Compressed Air.

Nenthead & Nentsbury.

lines in condition, and to test the rock-drills.

Compressed Air produced occasionally by Middlecleugh Compressor from Water power, to keep the air and water pipe

Rodderup.

Compressed Air, produced by Water Power only, amounted to about 250 cubic feet per minute at a pressure of approximately 80 lbs per square inch in the mine for 24 hours daily and seven days per week. The Compressed Air is used for pumping purposes only.

## **NENTHEAD MINES NOVEMBER 1948**

NENTSBURY MINE. The main level has been maintained and is accessible for 400 metres East of Wellhope Shaft. Falls in Dupont Vein, North of Wellhope Shaft, have been cleared and the level repaired. Two miners only are employed.

MILL. Idle — kept in fair condition.

RODDERUP MINE. Rodderup Mine is inspected on alternate days, and oftener if needed. The mine main levels are kept in good condition up to near where the large fall occurred in August 1947. The water in the East End Shafts is kept about 4 metres below the 18.28 metres, workings where the Flats were last worked. These workings can be inspected at any time.

MILL. In fair condition.

### SALES.

Lead Ore. None sold

Witherite. None produced or sold.

Gravel. 73.75 tons sold, net value £18. 16s. 9d.

FLUOR SPAR DUMPS. Nothing to report.

GENERAL. During the month, frequent visits have been made by I.S.C. officials, by members of the staff of Messrs. Gerald Eve & Co., who are preparing a statement for compensation in respect of Rampgill Mill, and by representative, we understand, of the District Valuer. I.S.C. officials, who, from the date when Rampgill Mill was released from requisition, have had the key to the building, have placed some machinery inside. Every possible facility and help has been given them, and our relations throughout have been perfectly friendly.

A good deal of work has been caused by the Town & Country Planning Act coming into force at this juncture. We have done much of the detail work and marked the new plans. Messrs. Blackburn & Main have checked these wherever possible, and have submitted the applications within the specified time.

Respecting the assignment of the property I see nothing to stop the assignment being executed at an early date. The principal matters are now in the hands of the respective Solicitors to both parties, who are working amicably in the interests of both parties.

# Report on the Nenthead Mines December 1948

## REPORT

@@@@@@@@@

on the

NENTHEAD MINES  
@@@@@@@@@@@@@@@@ @@@@@@@@@@

DECEMBER 1948  
@@@@@@@@@@@@@@@@ @@@@@@

|                      | <u>Nentsbury.</u> | <u>Rampgill.</u>            | <u>Rodderup.</u> | <u>Totals.</u> |
|----------------------|-------------------|-----------------------------|------------------|----------------|
| Ore Mined            | Nil               | Now in V.M.<br>possession   | Nil              | Nil            |
| Ore milled           | Nil               | pending a<br>settlement     | "                | "              |
| Lead Comcs.          | "                 | with Anglo<br>Austral Mines | "                | "              |
| % Recovery           | "                 | Ltd & I.S.C.<br>Ltd.        | "                | "              |
| Hours worked in Mill | "                 |                             | "                | "              |
| Tons per hour        | "                 |                             | "                | "              |
| Tons in stock        | "                 |                             | "                | "              |

## STOCKS.

|                | <u>Nentsbury</u>                                                                | <u>Rodderup</u> | <u>Wellhope</u> | <u>Totals.</u> |
|----------------|---------------------------------------------------------------------------------|-----------------|-----------------|----------------|
| Crude Mine Ore | Nil                                                                             | Nil             | 2300 tons       | 2300 tons      |
| Galena         | Nil                                                                             | 2.572 Tons      | Nil             | 2.572 "        |
| Witherite      | Nil                                                                             | Nil.            | Nil.            | Nil.           |
| Fluor Spar     | Fluor Spar dumps as previously reported,<br>estimated to amount to 75,000 tons. |                 |                 |                |

Note: No Witherite produced or sold

## Nenthead & Nentsbury.

## Compressed Air.

Compressed Air produced occasionally by Middlecleugh Compressor from Water Power to keep the air and water pipe-lines in condition and to test the Rock-Drills.

## Rodderup.

Compressed Air produced by Water Power only, amounted to about 250 cu.ft. per minute at a pressure of approximately 80 lbs per sq. inch in the mine for 24 hours daily and seven days per week, for pumping purposes only.

## **NENTHEAD MINES DECEMBER 1948**

NENTSBURY MINE. Nentsbury Mine is on a "care and maintenance" basis only. Two miners are employed to maintain the Main Level up to Wellhope Shaft, and from there, eastwards as far as ventilation permits.

MILL. Idle - kept in fair condition.

RODDERUP MINE. Rodderup Mine is inspected frequently, often four days weekly if necessary. This mine is also on a "care and maintenance" basis only. The water is lowered and kept at about 4 metres below the 18.28 Metre Level where the Flats can be inspected, and where work was last done.

MILL. In fair condition.

### SALES.

Lead Ore. None sold.

Gravel. None sold

Fluor Spar. Nothing to report.

GENERAL. Frequent requests have been made to us by Mr. MacPhail (Messrs. Blackburn & Main) for details re; bits of property scattered over the V.M. Co.'s leased area, to be supplied to Mr. Delafield, all of which, have been dealt with immediately. Expressing my personal opinion, I see nothing to stop the transfer of the V.M. Co.'s property to I.S.C. Ltd., or Anglo-Austral Mines Ltd., or both, at an early date. The question of Compensation for Damages to Rampgill Mill may take some time to settle, but as long as I.S.C. do not interfere with the structure of the building, before the District Valuer has agreed the statement of condition prepared by Messrs. Gerald Eve & Co., it seems to me the assignment could be made, and the sooner the better. Latest information infers that the date for the completion of the transaction will not be long, delayed.

**ANNUAL REPORT  
On the  
NENTHEAD MINES  
1948**

In all probability, this will be the last Annual Report which I shall write for the Vieille Montagne Zinc Company, and, consequently, I shall try to deal with every aspect of the company's activities during 1948, leading up to the provisional sale of the assets of the Company to Imperial Smelting Corporation Ltd.

In my report for 1947, I stated that the Ministry of supply had derequisitioned the Hillersdon, Rampgill and Smallcleugh dumps, the Brownley Hill site, and the accommodation road at Smallcleugh. I also reported that these sites and roads were left in a dangerous condition, and that our solicitors, Messrs. Blackburn & Main, had informed the District Valuer at Carlisle, by whom the release notices were served, that the V.M. Co. could not accept the return of the properties without an undertaking that some responsible Government Department would either level the sites and repair the roads, or pay the V.M. Co. compensation for carrying out the necessary work. Estimates were prepared by us, and discussions took place with Messrs. Blackburn & Main, after which the estimates were submitted to the District Valuer. Up to the end of 1948, the Government did nothing in this respect, neither carrying out the work required nor agreeing to compensate the V.M. Co. if the V.M. Co. undertook the work. The general position regarding these sites, Arial, Ropeway pylons, and the roads, therefore remains the same as was reported in 1947.

The Rampgill Mill Building was de-requisitioned on Sept. 13th the notice being received by us on Sept. 15th 1948. For some weeks previous to this date, the Ministry had been dismantling and removing their plant and most of it had been taken from the building by Sept. 13th. Some items had been left, however, for the use of Imperial Smelting Corporation Ltd., who had purchased them, and who had also previously provisionally agreed to purchase the whole of the V.M. assets. The rent due for the occupation of the Mill was paid in full by the Ministry up to the date of release.

When derequisitioned, the Building was in a very dilapidated condition, and the machinery, owned by the V.M. and left in the Building at the time of requisitioning was manly in a very bad state. To obtain compensation for the damage to the Mill Building and machinery during the requisitioning period, a claim had to be submitted by the V.M. Co. within a specified time. Notice of such a claim was given to the District Valuer by Messrs. Blackburn & Main, within the stated time. Respecting this claim, it is understood that the first £10,000 allowed, becomes the property of I.S.C., and any amount received above that sum, will be retained by the V.M. Co. As the owners of the property, at the material times of requisitioning and release, the claim had to be made by the V.M. Co, if the £10,000 interest of the I.S.C. and the V.M. Interest in any amount in excess of that sum, were not to be prejudiced.

Recognising that a detailed claim, prepared solely by a member of the V.M. Co., might also be prejudicial, it was agreed after a discussion in Messrs. Blackburn & Main's office in Carlisle, at which the I. S.C. solicitor, Mr. Delafield, and I were present, that the claim should be prepared by an independent firm of Valuers and Surveyors.

It was decided to engage Messrs. Gerald Eve & Co., of Curzon Street, Mayfair, London, who had undertaken similar work for I.S.C. and were recommended by Mr. Delafield.

It was farther agreed, that if the eventual compensation award did not exceed £10,000, I.S.C. would bear the whole of the expense, but if the award was in excess of £10,000 the costs would be borne proportionately to the amounts received by I.S.C. and V.M. his matter was not settled at the end of 1948, although detailed schedules had been submitted to the district Valuer by Messrs. Gerald Eve & Co.

It seems unnecessary in this report to detail the long correspondence with Messrs. Basic Minerals Ltd., and, as I understand, their principal partner, Mr. Graham-Seatoun, and the negotiations which ensued between these parties, the Imperial Smelting Corporation, Messrs. Blackburn & Main, and ourselves, which ended when Mr.

Mr. Graham-Seatoun, failed to hand to I.S.C., the agreement prepared by Messrs. Blackburn & Main, and sent to him for comment by I.S.C. On March 27th, Mr. Delafield wrote Mr. Graham-Seatoun, advising him that the offer had been withdrawn, after Graham-Seatoun had informed I.S.C. that a better offer had been received for the Middle Level dumps. In April I saw Mr. Oldridge, Commercial Manager of I.S.C. at Carlisle, who stated he would enquire further into the matter on his return to London. Not hearing from him, I wrote him early in May, and on May 12th, Mr. Delafield replied, stating that Mr. Oldridge had requested him to do so. Correspondence followed and on June 29th 1948, Mr. Oldridge, and Dr. Hiscock, Operations Manager, visited Nenthead for a discussion. From then onwards progress was made, and on July 20th 1948, Mons. Liebecq, Mr. Hallett and myself met Mr. Oldridge and Mr. Burwood (Chief Metallurgist for I.S.C.), in London, when it was provisionally agreed, subject to Head Office approval, that the whole of the assets of the V.M. in this district should be sold to I.S.C. for the sum of £70,000.

Since that date many officials of I.S.C. have visited Nenthead and inspected machinery, plant etc., both above and below ground. Early in September, Mr. Delafield, met Mr. MacPhail, principal of Messrs. Blackburn & Main, at Carlisle, when it was arranged that Mr. MacPhail would prepare the contract and deed of Assignment, transferring the V.M. assets to I.S.C. This was completed by, mid-September, and copies sent to Head Office and I.S.C. The document called for some comment and amendment, especially as the Middle Level Dumps, the most valuable V.M. asset, was only leased from the Greenwich Hospital up to December 1952, and not owned by the V.M. Co. as in the case of the Firestone Fluor Spar dump at Nenthead, which was purchased with the other property in 1896 on the terms of a long lease of a thousand years extending from about 1600. In effect the V.M. Co. owned the Firestone dump, but they only possessed the right to work the Middle Level dumps, up to December 1952 by paying a Royalty of 1s/- per ton. Furthermore the V.M. Co. paid nothing for the

Middle Level Dumps, and this fact has meant that the matter has had to be dealt with carefully so far as Income Tax is concerned. It has caused both; solicitors (Mr. Delafield and Mr. MacPhail), and the accountants, to give careful consideration to the apportionment of the Purchase price, to avoid either party paying more Tax than was strictly necessary. Both solicitors are doing all that is possible to get this matter equitably adjusted, but there is no possible means of bringing pressure to bear on H.M. Inspector of Taxes to hasten a decision. Having sent all information to Head Office during the past six months, this report would be most unduly lengthened by repeating it all here, and I am therefore restricting myself to the main points at issue, and the position at the end of 1948. At the end of 1948, the contracts were almost completed.

#### NENTSBURY.

MINE. No development was done in Nentsbury Mine during 1948, only a little Mining being undertaken during the early months of the year, and the main level maintained during the remaining portion of the year, up to Wellhope Shaft and as far East as safe working was permitted by the ventilation. 30 tons of crude Lead Ore was produced, and this was crushed at Rodderup Mill to produce 4 tons of Lead Concentrates, a recovery of 13.3%

50.8575 tons of Witherite was produced up to the end of July, when acting upon instructions from head Office, no further production of any description was undertaken.

Early in the year, a foreman and two miners were employed, but at the end of February, one miner left to be employed nearer his home in Alston. For the remainder of the year, only the foreman and one miner were therefore employed. The value of the Lead Ore concentrates, when sold to Messrs. Walkers Parker & Co., Ltd., Newcastle-on-Tyne, and the British Pyros White Lead Co., of West Drayton, was £65. 7s. 8d. per ton Nett. The value of the hand-picked Witherite, sold to Messrs. Athole G. Allen (Stockton) Ltd., was £7. 8s. 8d. per ton on site.

MILL. The work, undertaken by the Cumberland County Council for the sum of £162., for restoring the water-supply to Nentsbury Mill, after a motor-accident had destroyed the original aqueduct in 1947, was completed in May 1948, and is satisfactory. The Council supplied the 15 inch diameter pipes to carry the water underground, excavated the trench and then restored the road surface, did any other necessary excavations, and connected the water supply. The amount of £162 was met by the V.M. Co. from the Compensation for damages received in 1947 from the Haulier's Insurance company.

During the year, the Mill has not been in operation, but the Crossley Oil Engine and Starting Equipment (small Compressor and Air Receiver) have been periodically Inspected and insured. The Mill generally is in fair condition but sieve and cylinder plates are badly rusted and may have to be renewed. The crusher, rolls, jigs and tables need cleaning, but otherwise the mill could operate at little notice.

#### RODDERUP.



MINE. 1948 was not a good year. In January, ore broken in the 10 Fathom level Flats (18.28 metres), had to be stored pending the installation of a winch to be erected in the Blackburn Level, to hoist the ore to that Level. When the installation of the winch was completed, a series of labour troubles began, and one by one left our employ for work in small Coal-mines in the neighbourhood, which are more or less subsidised by the Government and can pay higher wages. Also, the erection of a number of houses in the district, by the local Council, attracted a number of both skilled and unskilled men. In this case also, the rate of pay was higher, directed so by the Ministry of Labour. We were therefore left with a small number of more or less dissatisfied, and in most cases, inefficient, workmen. In spite of introducing Bonus schemes to encourage efficiency, the results were not satisfactory.

The output of mine-ore for the year was only 389 tons, from which, when crushed in the Mill, and including ore recovered from the re-treatment of Slimes, 27.463 Tons of concentrates was produced. Of this, 24.891 tons was sold, and 2.572 tons remained in stock.

The average price received for the Concentrates sold, was the same as for Nentsbury, viz: £65. 7s. 8d. per ton nett. The percentage of Lead in the Concentrates was 80 to 82%.

I estimate that after allowing for the production of concentrates recovered from Slime residues, the approximate percentage recovery from the mined ore was 6.29%.

No actual development was done.

MILL. Kept in reasonably good condition, and could operate at short notice. Some items of plant are ready for overhauling

#### SALES.

Total sales for the year were as follows:

|                      | <u>Tonnage.</u> | <u>Nett Value.</u> |
|----------------------|-----------------|--------------------|
| Nentsbury Lead Cons. | 4.0000          | £263. 10. 8.       |
| Rodderup Lead Cons.  | 24.3910         | 1627.17.6.         |
| Fluor Spar           | -               | -                  |
| Witherite            | 50.8575         | 378. 3. 6.         |
| Stone & Gravel       | 573.7500        | 110. 16. 8.        |

#### FINANCE.

The Bank Balance on December 31st 1947, was given in my 1947 Report, as £8,249. 8. 6. This was the figure given by the Bank on that date, and did not include un-cleared cheques etc. the statement agreed by the Auditors was £8331. 2. 10., and the corresponding Balance this year, Dec. 31st is £4875. 9. 8. The approximate loss for this year, therefore seems to be about £3465. 13. 2., which will be varied by the amounts outstanding as either owing, to or by the Company on Dec. 31st 1948. One Item, which should considerably increase the loss, is the account of Messrs. Blackburn & Main.

We have not received a detailed statement from them for nearly three years, owing to the fact that some of the matters in which they were acting for us, had not, and have not yet, been brought to a conclusion. I have reminded them

yearly, and they have replied that they would submit their accounts when the business was completed, this will probably be some time in 1949, and I can offer no estimate of what their account will amount to, especially in view of the considerable time devoted by more than one member of their staff to our affairs during 1948. I am drawing attention to this matter now, and also to Messrs. Greaves & Co.'s account, which will not be excessive, but we have had two or three interviews with them in connection with the negotiations with I.S.C. and with correspondence, their account is likely to be more than usual.

#### GENERAL.

In view of the fact that the V.M. Co. will cease to exist here in Alston Moor, after the completion of the transfer of its assets to I.S.C. and Anglo-Austral Mines Ltd., I do not consider it is necessary for me to make any recommendations regarding the future operations of the agency.

Since the transfer was provisionally agreed in July, we have kept strictly to Head Office instructions to cease production. As far as possible with the limited number of employees, we have maintained the mines, levels, and machinery in the same condition as they were at the time when the sale was made "in principle" in July. There has not been any appreciable depreciation of machinery or stocks since that date.

It may seem that there has been undue delay in completing the transfer. However, knowing, as I believe I do, all that has transpired in this country in regard to the negotiations and the different complications encountered, I can assure Head Office that no time has been lost or wasted. Other interested parties have had to be considered and consulted, and where Government departments have been concerned, it has been impossible to proceed any faster than these Departments permitted. To obtain prompt and definite replies from these Departments has been impossible, and even now, in one case at the time of dictating this (Jan. 22nd 1949) no reply has been received from the solicitors for the admiralty, Messrs. James Gray & Sons, in response to a request sent months ago for document agreeing to the Transfer of the Admiralty leases from V.M. to I.S.C. Messrs Blackburn & Main have given prompt attention to the V.M. affairs, even to the extent of members of their staff working at week-ends, in one case up to midnight, in order to have documents prepared and dispatched promptly. These delays have been most irritating and have caused what otherwise would be simple matters, to obstruct progress. In all matters requiring our personal attention at Nenthead, these have been dealt with, in almost every case, on the day received, and in no case, has the delay been more than a day or so.

Another matter which has added considerably to our work at Nenthead in recent months, has been the coming into force in July 1948, of the "Town and Country Planning Act". This has compelled all mine-owners and mining companies, to apply for permission to continue

operating their mines. Arising from these applications, have come requests to supply 4 copies of the 25" to 1 mile scale Ordnance Sheets covering the areas

leased, which on being obtained and the various area indicated, have to be supplemented by further 25" to 1 mile scale Ordnance Sheets, on which must be marked in distinctive colours all buildings, shafts, pit-heads, dumps and roads, etc., with variations in the colouring to show whether these items are at present in use, disused, or likely to be used. This might not appear a formidable task at first sight, but having regard to the area covered by the V.M. interests, and the rather unusual scale of 25" to 1 mile, it entails a lot of work, especially as the present Ordnance Sheets were prepared more than 25 years ago, in fact nearly 50 years ago, and therefore do not show many modern features. As an example, Wellhope Shaft, which was sunk in 1925/26 is not shown on the Ordnance Sheets. These omissions have meant that these items have had to be transposed in detail from our mining plans.

Messrs. Blackburn & Main have been dealing with these applications on our behalf, and the matter was placed in their hands in good time for the applications to be submitted to the appropriate authorities by the specified date, October 31st 1948. Requests to us for detailed information extending over many years, were made by the agents for the landlords in order to present their claims for compensation under the Act, within a specified time, and from Messrs. Blackburn & Main to complete the Plans etc. which have been required, as their staff was naturally unacquainted with the details of the buildings, roads, etc. etc. In all this, we have also had to consider, and at times to consult, I.S.C., for whom copies of the applications and plans are being kept. I consulted Messrs. Blackburn & Main, concerning the possibility of delegating this work to I.S.C., but was informed that we could not do so, because the V.M. was in occupation when the Act came into force, and had made the applications for permission to continue mining, and therefore the plans and information must be supplied by the V.M. the expense of this will, I anticipate, prove fairly heavy, and the cost of the Ordnance Sheets which has to be borne by the applicants, will alone be considerable in view of the great number required. It is unlikely that this matter will be settled before I.S.C. take over, and in this case, some arrangement will have to be made with them to ensure its completion. It is notable, that while the Planning authorities, a Government Dept., insist upon 25" scale plans, the Government Dept. responsible for providing and selling these, were unable to supply then for some months, and at the end of 1948 we were still awaiting many of these.

#### ORE RESERVES.

The Ore Reserves, mainly of Mixed Ore containing Galena, Blende, and Witherite, were estimated by me in 1939, after operations had then ceased, in Nentsbury Mine, to amount to 76,633 tons. In 1940, after Dr. K. C. Dunham had spent some time in Nentsbury Mine, he agreed with this figure in his report to the Metallic Ores Committee, and added that there was possibly another 50,000 tons available with very little extra development. In 1941, representatives of the Non-Ferrous Minerals Development spent considerable time in the mine, and estimated the Ore Reserves at 54,000 tons. The lower N.F.M.D. figure of gross tonnage, however, was counterbalanced by the higher values they estimated for the mineral contents, and in effect, gave a similar result for the actual estimated tonnage of Pb., Zn., and BaCO<sub>3</sub>., present.

Since the above mentioned reports were made, less than 1000 tons has been mined.

It is not possible to give actual figures of ore reserves at Rodderup Mine, as no areas have been tested and blocked out, owing to the heavy cost involved and the shortage of labour. Where the Flats in the 10 Fathom Level were opened up towards the end of 1947, the ore mined was of a fair grade when production ceased in July 1948 after the provisional agreement was made to transfer the V.M. interests to I.S.C. The grade of ore mined in Point B, down the Incline from the Blackburn Level, was also showing, satisfactory improvement, when the area was isolated by the collapse of the roof at the top of the two inclines in August 1947.

Cumberland County Council. During the year, the matter of the road proposed to be constructed by the county Council over part of the V.M. property near Rampgill Mill, from the main Alston-Weardale Road to Overwater, Nenthead, was again raised by the County Council. Following a visit of the County Surveyor on Sept 3rd, and the submission of a Plan by him, Head Office agreed to the county Council's proposal, and gave their consent to the dedication of the parcel of ground involved for the construction of the road.

Alston Rural District Council. There has been no definite change in the position, so far as the V.M. is concerned, regarding the proposals of the Alston R.D.C., to acquire the water rights of Perry's Dam and Priorsdale, but according to various references in the press from time to time, the matter is still being pursued by both the District and County Councils. During the year, representatives of both Lord Allendale and the Admiralty have visited Nenthead and discussed the position with me. The Admiralty representatives, Messrs. Drivers Jones & Co., recommended the Director of Greenwich Hospital, against my advice, to sell the Water Rights to the Council, provided that ample water supplies were made available by the Council for both the mining and agricultural industries hitherto dependent upon the Perry Dam and Priorsdale areas.

I have not been advised whether the Director acted upon this advice or not, and in subsequent interviews with Mr. Hamilton-Russell, the Northern mineral represent of Greenwich Hospital Estates, I have impressed upon him the need for the unrestricted use of the Water Rights for the mining industry. Mr. Russell has always advised the Director to that effect.

Staff, etc. In conclusion, I would like to express my sincere thanks to the Societe de la Vieille Montagne, as represented by the members of Head Office Staff whom I have known, either by personal meeting or by correspondence. I regard it as an honour to have been associated for over twenty-five years with a Company whose honour and integrity are second to none, among the Companies I have known, whatever the nationality. I make this statement unreservedly after 48 years of mining and milling experience with several companies.

To the Nenthead Staff generally, I have in the past expressed my thanks, and for the last time I wish to place on record my appreciation for their help, in the main unreservedly rendered whenever requested. I could not wish for a more conscientious and faithful Staff.

I also wish to record the help rendered Mr. A. M. MacPhail principal of Messrs. Blackburn & Main, our solicitors. He has done everything legally possible, in the interests of the Company, sometimes even when it perhaps seemed that the business of the Company was being delayed.

The reputation of, and respect for, Messrs. Blackburn & Main is of the highest character. I am personally indebted to Mr. MacPhail for his help and guidance. I close with the sincere hope that the affairs of the Vieille Montagne, may flourish and prosper in the future, in each and every part of the world where they may be established.

Nenthead  
31<sup>st</sup> Jan 1949.

A handwritten signature in dark ink, appearing to read "Amos Redden", with a long horizontal flourish extending to the right.

**Middlings:** *The second quality of ore obtained by washing*

**Wet Weight**

*"Wet basis" means LEAD ORE in its natural wet state*

*"Dry basis" means LEAD ORE dried at 105 degrees Centigrade*

**BaCO<sub>3</sub>** = Barium Carbonate = Witherite, used in bricks, ceramic glazes, lubricants, paints, glass and cement.

**Athole G. Allen** (Stockton) Limited, incorporated 1934, factory at Stockton closed about 1960, (Notice of liquidation in the London Gazette 4<sup>th</sup> January 1995). Produced TNT and Barium based products.

Owned Close House Mine - Barytes, Middleton Teesdale, in 1940's

Owned Lunehead Mine - Barytes, Lunedale, Teesdale, in 1940's

**Morris Ashby Smelting Co. Ltd.** Deanshanger, Nr. Stony Stratford Great Horwood, Northamptonshire